SANYO

FILE NO.

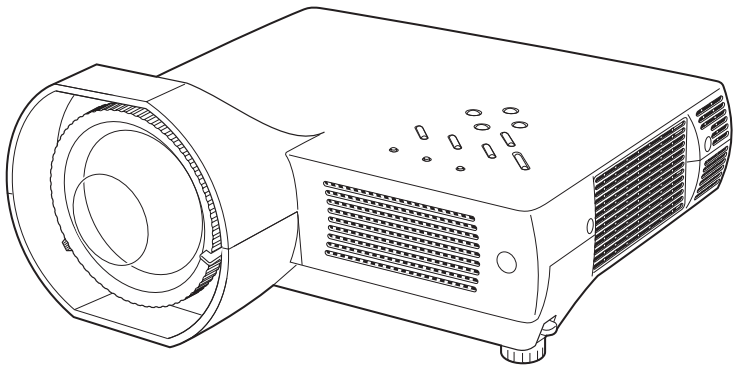
SERVICE MANUAL

Multimedia Projector

Model No. PLC-WXE46
PLC-WXL46

U.S.A, Canada,
Europe, U.K, Asia

Original Version



Chassis No. KM5-WXE4600
KM5-WXL4600

Match the Chassis No. on the unit's cabinet bottom with the Chassis No. in the Service Manual.
If the Original Version Service Manual Chassis No. does not match the unit's, additional Service Literature is required. You must refer to "Notices" to the Original Service Manual prior to servicing the unit.

PRODUCT CODE

PLC-WXE46	PLC-WXL46
1 122 483 40 (KM5AY)	**1 122 483 30** (KM5AZ)
1 122 484 40 (KM5AY)	**1 122 484 30** (LM5AZ)
1 122 484 42 (LM5CY)	**1 122 484 32** (LM5CZ)

REFERENCE NO. SM5111073-00

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Safety Instructions

SAFETY PRECAUTIONS

WARNING:
The chassis of this projector is isolated (COLD) from AC line by using the converter transformer. Primary side of the converter and lamp power supply unit circuit is connected to the AC line and it is hot, which hot circuit is identified with the line (⎓) in the schematic diagram. For continued product safety and protection of personnel injury, servicing should be made with qualified personnel.

The following precautions must be observed.

1: An isolation transformer should be connected in the power line between the projector and the AC line before any service is performed on the projector.

2: Comply with all caution and safety-related notes provided on the cabinet back, cabinet bottom, inside the cabinet or on the chassis.

3: When replacing a chassis in the cabinet, always be certain that all the protective devices are installed properly, such as, control knobs, adjustment covers or shields, barriers, etc.

DO NOT OPERATE THIS PROJECTOR WITHOUT THE PROTECTIVE SHIELD IN POSITION AND PR OPERLY SECURED.

4: Before replacing the cabinet cover, thoroughly inspect the inside of the cabinet to see that no stray parts or tools have been left inside.

Before returning any projector to the customer, the service personnel must be sure it is completely safe to operate without danger of electric shock.

PRODUCT SAFETY NOTICE

Product safety should be considered when a component replacement is made in any area of the projector. Components indicated by mark ⚠ in the parts list and the schematic diagram designate components in which safety can be of special significance. It is, therefore, particularly recommended that the replacement of there parts must be made by exactly the same parts.

SERVICE PERSONNEL WARNING

Eye damage may result from directly viewing the light produced by the Lamp used in this equipment. Always turn off Lamp before opening cover. The Ultraviolet radiation eye protection required during this servicing.
Never turn the power on without the lamp to avoid electric-shock or damage of the devices since the stabilizer generates high voltages (15kV - 25kV) at its starts.
Since the lamp is very high temperature during units operation replacement of the lamp should be done at least 45 minutes after the power has been turned off, to allow the lamp cool-off.

Specifications

Mechanical Information

Projector Type	Multi-media Projector
Dimensions (W x H x D)	12.59" x 5.73" x 11.85" (319.9 mm x 145.5 x 300.9 mm) (Not including protrusions)
Net Weight	7.5 lbs (3.4 kg)
Feet Adjustment	0˚ to 10.0˚

Panel Resolution

LCD Panel System	0.59" TFT Active Matrix type, 3 panels
Panel Resolution	1,280 x 800 dots
Number of Pixels	3,072,000 (1,280 x 800 x 3 panels)

Signal Compatibility

Color System	PAL, SECAM, NTSC, NTSC4.43, PAL-M, and PAL-N
High Definition TV Signal	480i, 480p, 575i, 575p, 720p, 1035i, and 1080i
Scanning Frequency	H-sync. 15–100 kHz, V-sync. 50–100 Hz

Optical Information

Projection Image Size (Diagonal)	Adjustable from 50" to 110"
Projection Lens	F 1.8 lens with f 6.6 mm with manual focus
Throw Distance	1.77' - 3.94' (0.53 m - 1.20 m)
Projection Lamp	200 W

Interface

Video Input Jack	RCA Type x 1
S-Video Input Jack	Mini DIN 4 pin x 1
Audio Input Jacks	RCA Type x 2
Computer Input 1 / Component Input Terminal	Analog RGB (Mini D-sub 15 pin) Terminal x 1
Computer Input 2 / Monitor Output Terminal	Analog RGB (Mini D-sub 15 pin) Terminal x 1 (In/Out switchable)
Computer/ Component Audio Input Jack	Mini Jack (stereo) x 1
Service Port Connector	Mini DIN 8 pin x 1
LAN Connection Terminal	100 Base-TX (100Mbps)/10Base-T (10Mbps), RJ45
Audio Output Jack	Mini Jack (stereo) x 1 (Variable)

Audio

Internal Audio Amp	1.0 W RMS
Built-in Speaker	1 speaker, ø1.1" (28 mm)

Power

Voltage and Power Consumption	AC 100–120 V (3.2 A Max. Ampere), 50/60 Hz (The U.S.A and Canada) AC 200–240 V (1.6 A Max. Ampere), 50/60 Hz (Continental Europe and The U.K.)

Operating Environment

Operating Temperature	41˚F–95˚F (5˚C–35˚C)
Storage Temperature	14˚F–140˚F (-10˚C–60˚C)

Remote Control

Battery	AA or LR6 1.5V ALKALINE TYPE x 2
Operating Range	16.4' (5 m)/±30˚
Dimensions	1.9" (W) x 0.87" (H) x 5.7" (D) (49 mm x 22 mm x 145.3 mm)
Net Weight	3.53 oz (100 g) (including batteries)

- The specifications are subject to change without notice.
- LCD panels are manufactured to the highest possible standards. Even though 99.99% of the pixels are effective, a tiny fraction of the pixels (0.01% or less) may be ineffective by the characteristics of the LCD panels.

c UL US LISTED

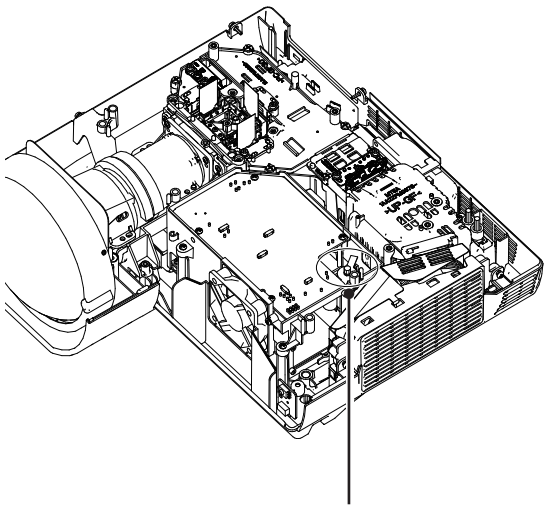
This symbol on the nameplate means the product is Listed by Underwriters Laboratories Inc. It is designed and manufactured to meet rigid U.L. Safety standards against risk of fire, casualty and electrical hazards.

Circuit Protections

This projector provides the following circuit protections to operate in safety. If the abnormality occurs inside the projector, it will automatically turn off by operating one of the following protection circuits.

Thermal switch

There is the thermal switch (SW902) inside of the projector to detect the internal temperature rising abnormally. When the internal temperature reaches near 105˚C, the thermal switch opens to stop the operation of the power supply circuit.
The thermal switch cannot be reset itself automatically even if the internal temperature becomes normal. Reset the thermal switch following to the below procedure.



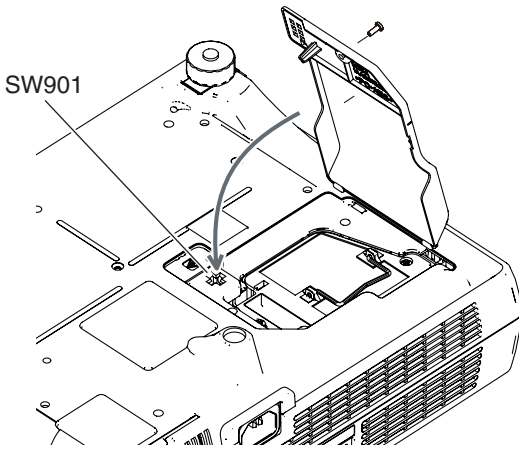
How to reset the thermal switch

1. Remove the cabinet top, cabinet front, main board and the Isolation sheet and then remove the power box top cover.
2. Press the reset button on the thermal switch in the power box.

CAUTION:
Before press the reset button, make sure that the AC cord must be disconnected from the AC outlet.

Lamp cover switch

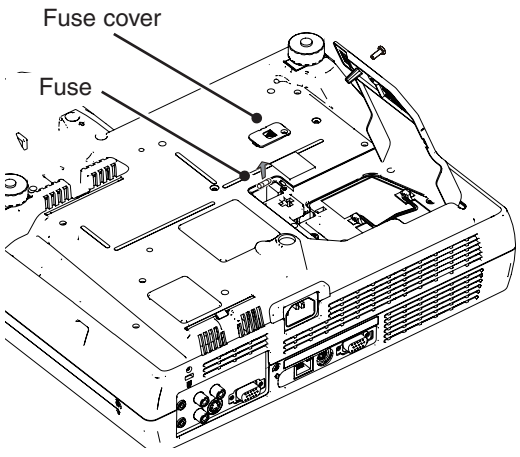
The lamp cover switch (SW901) cuts off the drive signal to the lamp circuit when the lamp cover is removed or not closed completely. After opening the lamp cover for replacing the lamp ass'y, place the lamp cover correctly otherwise the projector can not turn on.



Fuse

A fuse is located inside of the projector. When the POWER indicator is not lightning, the fuse may be opened. Check the fuse as following steps.
The fuse should be used with the following type;

Fuse Part No.: 323 021 7804
TYPE T6.3AH 250V FUSE
LITTLE FUSE INC. TYPE 21506.3



How to replace the fuse

1. Remove the lamp cover and fuse cover as shown in figure.
2. Take the fuse out from the aperture, and replace the new one with the specified type.

Warning temperature and power failure protection

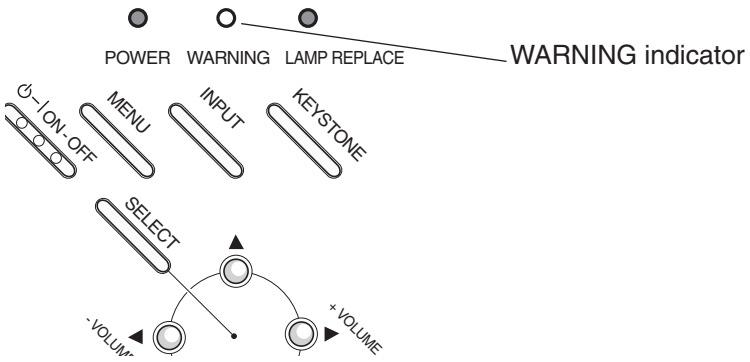
The projector will be automatically turned off when the internal temperature of the projector is abnormally high, or the cooling fans stop spinning, or the power supplies in the projector are failed.

- If the WARNING indicator is flashing, it may detect the abnormal temperature inside the projector. Check the following possible causes and wait until the WARNING indicator stops flashing, and then try to turn on the projector.
- If the WARNING indicator lights red, it may defect the cooling fans or power supply circuits. Check fans operation and power supply lines referring to the chapter “Power supply & protection circuit” in the Chassis Block Diagram section.

Possible causes

- Air filters are clogged with dust particles. Remove dust from the air filters by following instructions in the “Air filter care and cleaning” below.
- Ventilation slots of the projector are blocked. In such an event, reposition the projector so that ventilation slots are not obstructed.
- Check if projector is used at higher temperature place (Normal operating temperature is 5 to 35 ˚C or 41 to 95˚F)

Top Panel

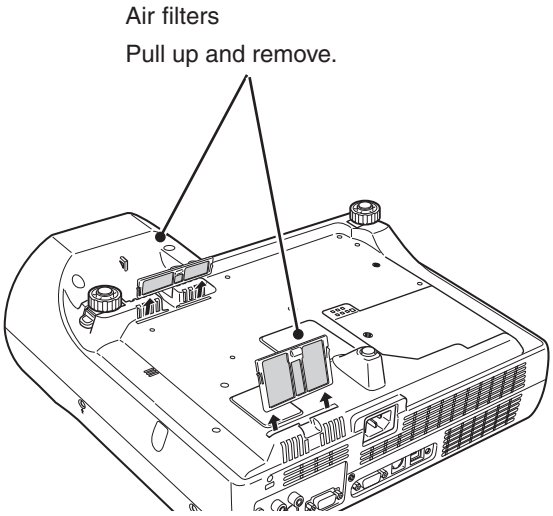


Maintenance

Air filter care and cleaning

Air filters prevent dust from accumulating on the optical elements inside the projector. Should the air filters become clogged with dust particles, it will reduce cooling fans' effectiveness and may result in internal heat build up and adversely affect the life of the projector. Clean the air filters following the steps below.

1. Turn off the projector, and disconnect the AC power cord from the AC outlet.
2. Turn over the projector and remove the air filters by pulling the latches upward.
3. Clean the air filters with a brush or rinse them softly.
4. When cleaning the air filters by rinsing, dry them well. Replace the air filters properly. Make sure that the air filters are fully inserted.



CAUTION:
Do not operate the projector with the air filters removed. Dust may accumulate on the LCD panel and the projection mirror degrading picture quality.
Do not put small parts into the air intake vents. It may result in malfunction of the projector.

RECOMMENDATION:
We recommend avoiding dusty/smoky environments when operating the projector. Usage in these environments may cause poor image quality.
When using the projector under dusty or smoky conditions, dust may accumulate on a lens, LCD panels, or optical elements inside the projector. This condition may degrade the quality of a projected image.
When the symptoms above are noticed, contact your authorized dealer or service station for proper cleaning.

Resetting the Filter Counter

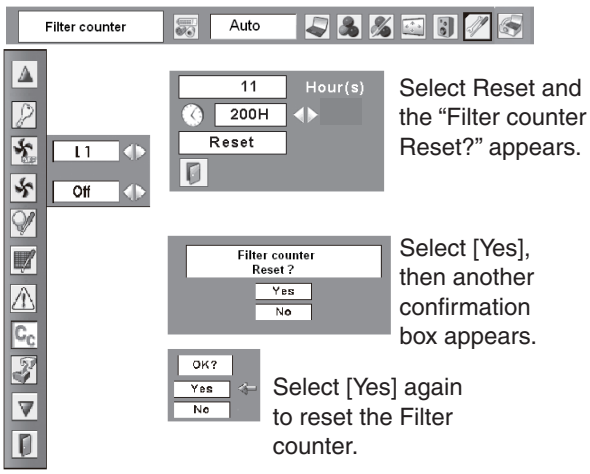
Be sure to reset the Filter counter after cleaning or replacing the filters.

1 Press the MENU button to display the On-Screen Menu. Use the Point ◀▶ buttons to move the red frame pointer to the Setting Menu icon.

2 Use the Point ▲▼ buttons to move the red frame pointer to Filter counter and then press the SELECT button. A dialog box appears showing the total accumulated time of the filter use, a timer setting option, and the reset option. Select Reset and the "Filter counter Reset?" appears. Select [Yes] to continue.

3 Another confirmation dialog box appears, select [Yes] to reset the Filter counter.

Filter counter



After long periods of use, dust and other particles will accumulate on the LCD panel, prism, mirror, polarized glass, lens, etc., causing the picture to darken or color to blur. If this occurs, clean the inside of optical unit.

Remove dust and other particles using air spray. If dirt cannot be removed by air spray, disassemble and clean the optical unit.

Cleaning with air spray

1. Remove the cabinet top following to “Mechanical Disassemblies”.
2. Clean up the LCD panel and polarizing plate by using the air spray from the cabinet top opening.

Caution:
Use a commercial (inert gas) air spray designed for cleaning camera and computer equipment. Use a resin-based nozzle only. Be vary careful not to damage optical parts with the nozzle tip. Never use any kind of cleanser on the unit. Also, never use abrasive materials on the unit as this may cause irreparable damage.

Disassembly Cleaning

Disassembly cleaning method should only be performed when the unit is considerable dirty and cannot be sufficiently cleaned by air spraying alone.
Be sure to readjust the optical system after performing disassembly cleaning.

1. Remove the cabinet top and main units following to “Mechanical Disassemblies”.
2. Remove the optical base top following to “Optical Unit Disassemblies”. If the LCD panel needs cleaning, remove the LCD panel unit following to “LCD panel replacement”.
3. Clean the optical parts with a soft cloth. Clean extremely dirty areas using a cloth moistened with alcohol.

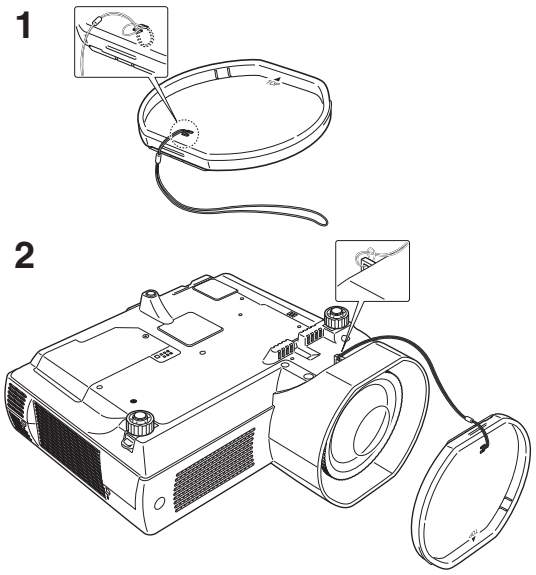
Caution:
The surface of the optical components consists of multiple dielectric layers with varying degrees of refraction. Never use organic solvents (thinner, etc.) or any kind of cleanser on these components.
Since the LCD panel is equipped with an electronic circuit, never use any liquids (water, etc.) to clean the unit. Use of liquid may cause the unit to malfunction.

Attaching the Lens Cover

When moving the projector or while it is not in use, replace the lens cover.

1 Thread the string through the hole on the lens cover and then tie a knot in the string to secure it in place.

2 Thread the other end of the string through the hole on the bottom of the projector. Then pass the lens cover through the resulting loop of the string and pull it to tighten the knot.



Cleaning the Projection Lens

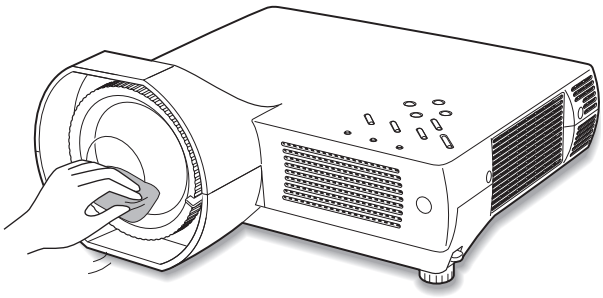
CAUTION

This projector is equipped with a plastic lens.
Do not rub the lens with a hard fiber cloth or hit it with something hard to prevent the lens from scratching.
Do not use a chemical cleaner (liquid and solid) to avoid deteriorating the lens.

Unplug the AC power cord before cleaning.

First, remove the dust with a blower. Then gently wipe the lens surface. Use a lens cleaning paper moistened with methyl alcohol (methanol). Avoid excessive use of cleaner. Do not use abrasive cleaners, solvents, or other harsh chemical cleaners to avoid damages the lens.

When the projector is not in use, replace the lens cover.

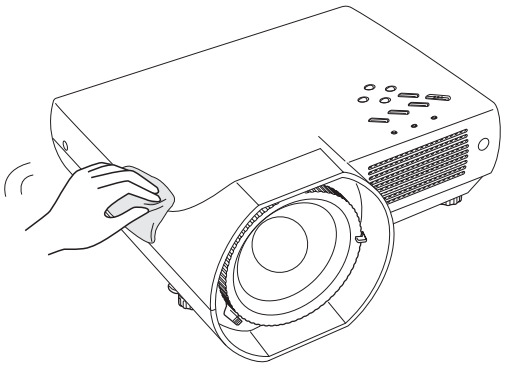


Cleaning the Projector Cabinet

Unplug the AC power cord before cleaning.

Gently wipe the projector body with a soft dry cleaning cloth. When it is heavily soiled, use a small amount of mild detergent and finish with the cleaning cloth. Avoid excessive use of cleaner. Abrasive cleaners, solvents, or other harsh chemicals might scratch the surface of the cabinet.

When the projector is not in use, put the projector in an appropriate case to avoid dust and being scratched.



Lamp Replacement

When the projection lamp of the projector reaches the end of its life, the LAMP REPLACE indicator emits a yellow light. If this indicator lights yellow, replace the lamp with a new one promptly.

WARNING:
TURN OFF THE UV LAMP BEFORE OPENING THE LAMP COVER.
USE UV RADIATION EYE AND SKIN PROTECTION DURING SERVICING.

Top Panel

This indicator turns yellow when the projection lamp reaches the end of its life.

Lamp replacement icon

✔Note:
The Lamp replacement icon will not appear when the Display function is set to “Off” , during “Freeze” or “No show” .

CAUTION

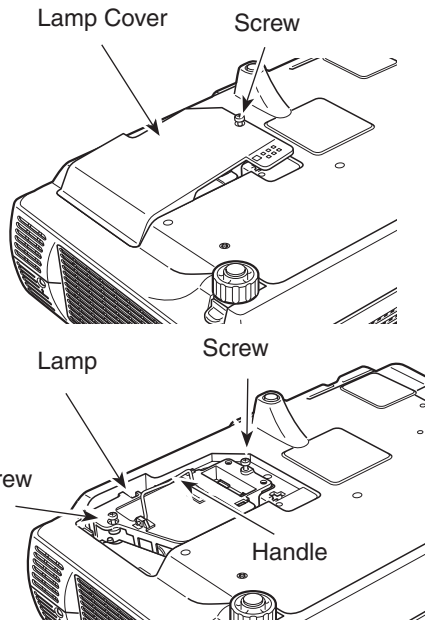
Allow the projector to cool for at least 45 minutes before you open the Lamp cover. The inside of the projector can become very hot.

CAUTION

For continued safety, replace with a lamp of the same type. Do not drop a lamp or touch a glass bulb! The glass can shatter and may cause injury.

Follow these steps to replace the lamp.

1. Turn off the projector and unplug the AC power cord. Let the projector cool for at least 45 minutes.
2. Turn the projector over. Remove the screw that secures the lamp cover, and then open the lamp cover.
3. Remove the two screws that secure the lamp. Lift the lamp out of the projector by using the built in handle.
4. Replace the lamp with a new one and secure it with the two screws. Make sure that the lamp is set properly. Put the lamp cover back and secure it with the screw.
5. Connect the AC power cord to the projector and turn on the projector.
6. **Reset the lamp replacement counter.**
   See “Lamp Replacement Counter” on the next page.



ORDER REPLACEMENT LAMP

Replacement lamp can be ordered through your dealer. When ordering a projection lamp, give the following information to the dealer.

Model No. of your projector : PLC-WXE46/PLC-WXL46

Replacement Lamp Type No. : POA-LMP106
(Service Parts No. 610 332 3855)

Lamp Replacement Counter

Be sure to reset the Lamp replacement counter after the lamp is replaced. When the Lamp replacement counter is reset, the LAMP REPLACE indicator stops lighting.

1 Turn the projector on and press the MENU button to display the On-Screen Menu. Use the Point buttons to move the red frame pointer to the Setting Menu icon.

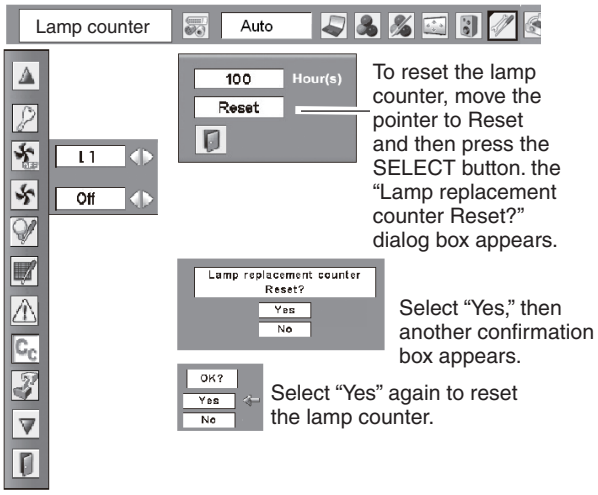
2 Use the Point buttons to move the red frame pointer to Lamp counter and then press the SELECT button. The first dialog box appears showing the total accumulated lamp time and reset option. If you select Reset, “Lamp replacement counter Reset?” appears. Select “Yes” to continue.

3 Another confirmation dialog box appears, and select “Yes” to reset the Lamp replacement counter.

✔Note:

Do not reset the Lamp replacement counter without implementing lamp replacement. Be sure to reset the Lamp replacement counter only after replacing the lamp.

Lamp counter



How to check Lamp used time

The LAMP REPLACE indicator will light yellow when the total lamp used time (Corresponding value) reaches 3000 hours. This is to indicate that lamp replacement is required.

The total lamp used time (Corresponding value) is calculated by using the below expression,

Total lamp used time = **T**eco + **T**normal x 2

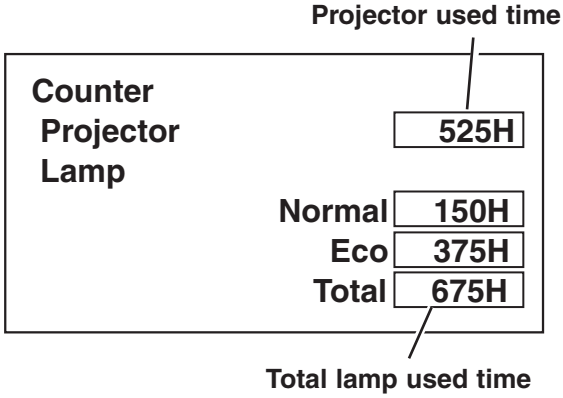
Teco : used time in the Eco mode

Tnormal : used time in the Normal mode

You can check the lamp used time following to the below procedure.

1 Press and hold the **ON-OFF** button on the remote control for more than 20 seconds.

2 The projector used time and lamp used time will be displayed on the screen briefly as follows.



Security Function Notice

Security Function Disable

This projector provides security functions such as "Key lock", "PIN code lock" and "Logo PIN code lock". When the projector has set these security function on, you are required to enter correct PIN code to use the projector. If you do not know the correct PIN code to the projector, the projector can no longer be operated or started. In this case, you must reset those function first according to the resetting procedure described below and then check up on the projector.

Function	Description
Key lock	Locks operation of the top control or the remote control. If the Key lock is enabled with top control lock, the projector can no longer be started. Initial setting: Key lock function is disabled
PIN code lock	Prevents the projector from being operated by an un-authorized person. Initial code: “1234”
Logo PIN code lock	Prevents an unauthorized person for changing the start-up logo and captured image on the screen. Initial code: “4321”

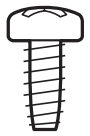
Resetting procedure

1 Turn the projector off (in the standby mode).
2 Press and hold the ◀ and ▶ button on the remote control at the same time for more than 10 seconds. The PIN code and Logo PIN code will be reset to the factory initial setting code.

Please refer to the owner's manual for further information of the security functions.

Mechanical Disassembly

Mechanical disassembly should be made following procedures in numerical order.
Following steps show the basic procedures, therefore unnecessary step may be ignored.
Caution:
The parts and screws should be placed exactly the same position as the original otherwise it may cause loss of performance and product safety.

Screws Expression (Type Diameter x Length) mm	
T Type	M Type
	

1. Cabinet Top & Fans (FN901, FN902), R/C Board removal

1. Remove 7 screws A (M3x8) to remove the Cabinet top.
2. Remove screw B (T3x6) to remove the R/C board.
3. Remove screw C (T3x6) to remove the Side grille.
4. Remove screw D (T3x6) to remove the FN901 and FN902.

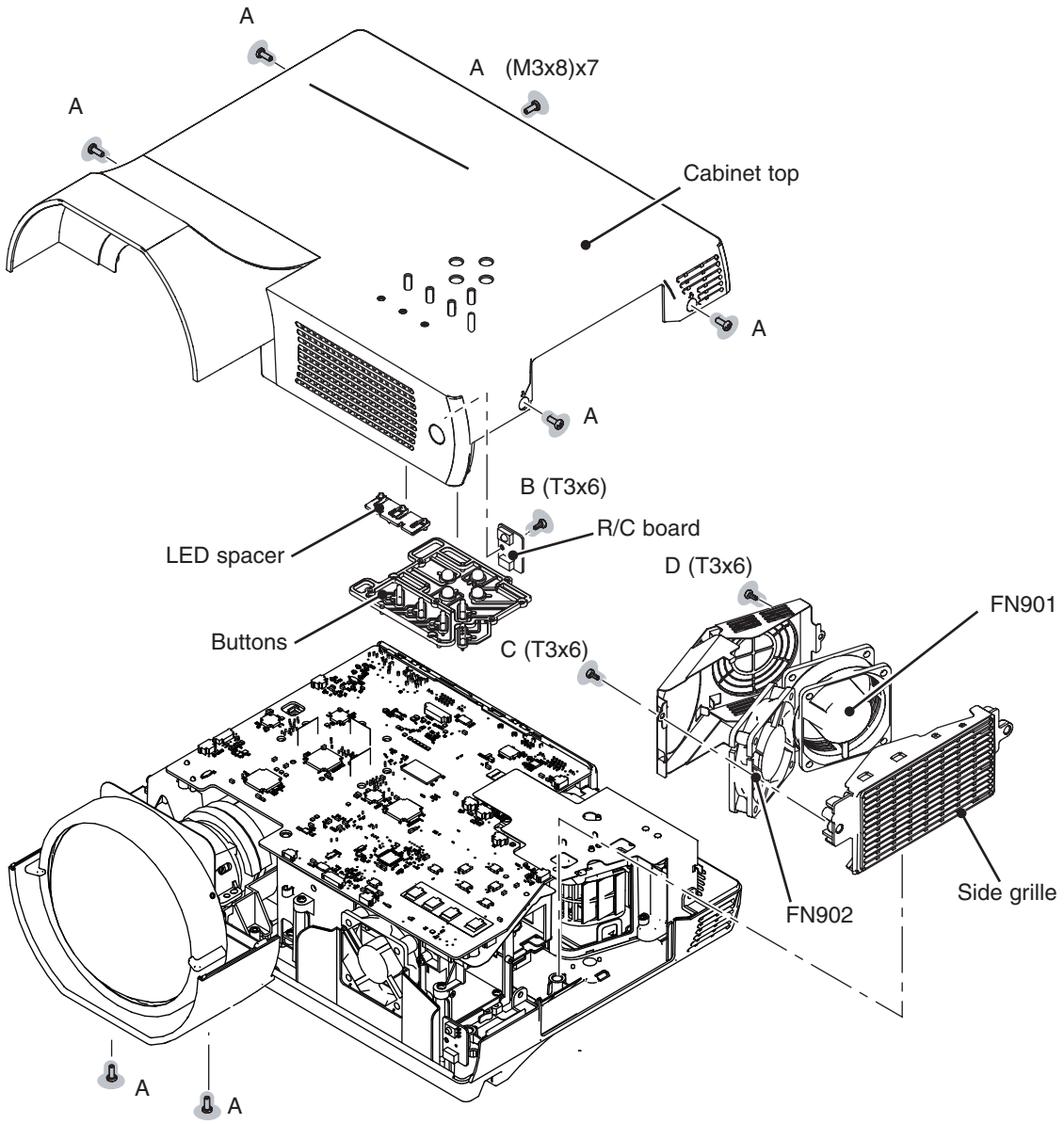


Fig.1

2. Main Board, Rear Panel Speaker(SP901) and Fan (FN905) removal

1. Remove 2 screws A (M2.5x6) to remove the Lamp Spacer Sheet.
2. Remove 7 screws B (M2.5x6) and screw C (M2.5x8) to remove the Main Board and remove screw D (M4x5) to remove the Grounding lead.
3. Remove Rear Panel.
4. Remove the speaker (SP901).
5. Remove screw E (T3x8) to remove the Lamp Mounting Duct and the FN905.

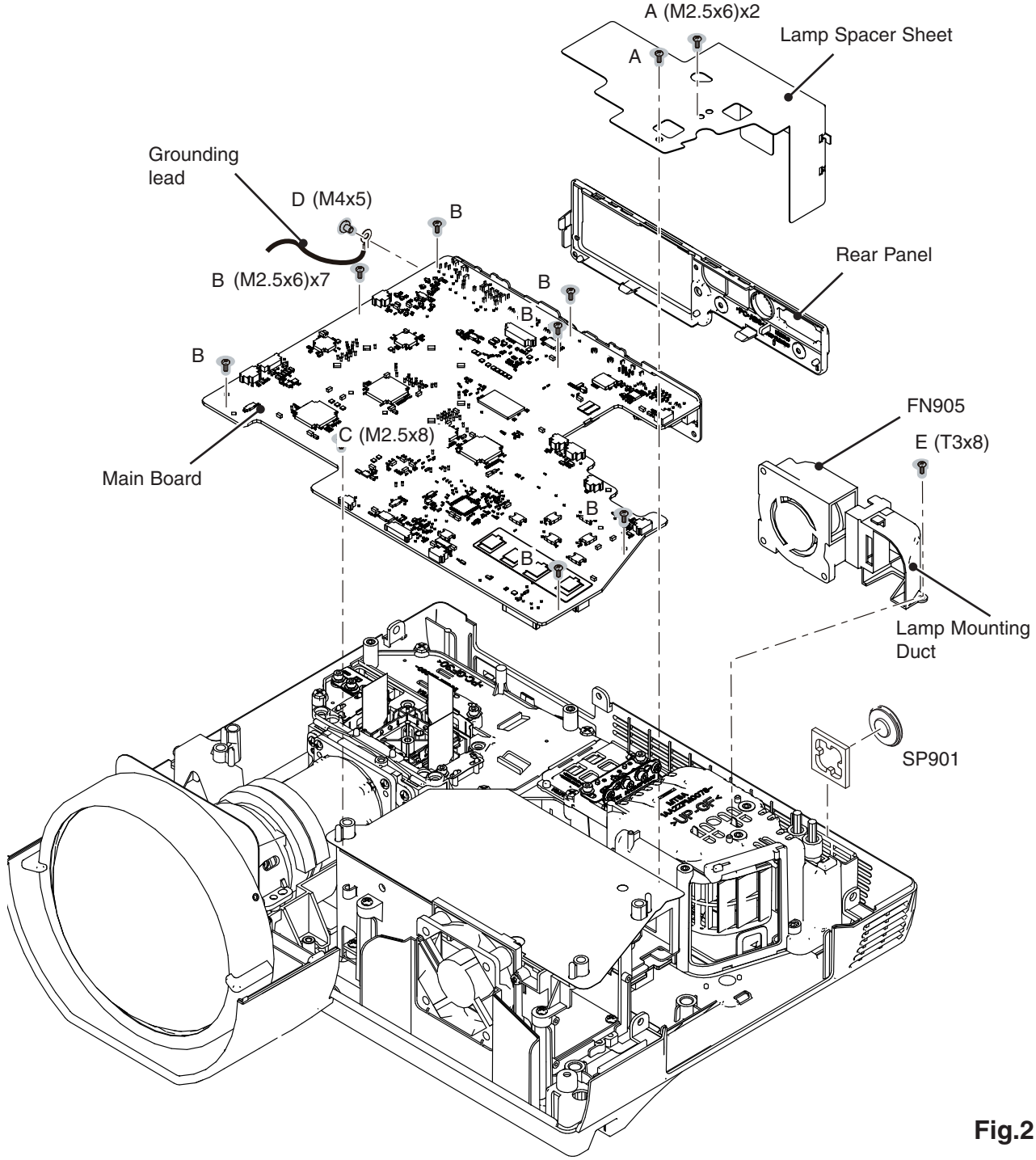


Fig.2

3. Power, Line Filter, Ballast Board, Thermal Switch (SW902), Fan (FN906) removal

1. Remove the Isolation sheet.
2. Remove 4 screws A (T3x6) to remove the Power Board and 2 screws B (T3x6) to remove SW902.
3. Remove 4 screws C (T3x6) to remove the Ballast Board.
4. Remove 2 screws D (T3x6) , screw E (T3x6) and 2 screws F (T3x6) to to remove the Power Board Holder.
5. Remove screw G (T3x6) to remove the Line Filter Board and the Line Filter Board Holder.
6. Remove the fan (FN906).
7. Remove screw H (M3x8) to remove the Ballast socket.

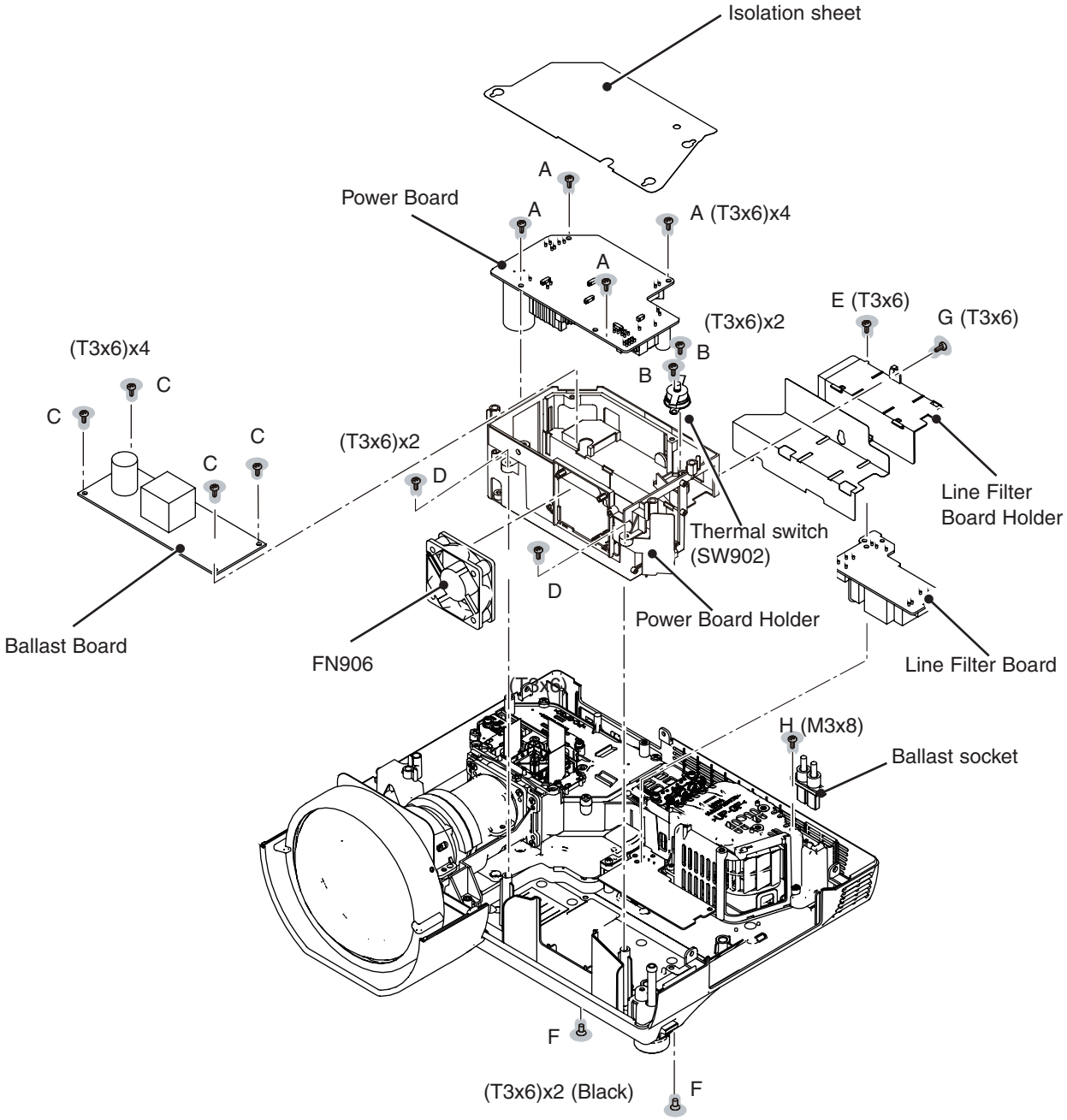


Fig.3

4. Optical Unit, Fans (FN903, FN904), Noise Filter removal

1. Remove the Lens top spacer sheet.
2. Remove 6 screws A (T3x6) and 2 screws B (T3x12) to remove the Optical unit.
3. Remove the Lens bottom spacer sheet.
4. Remove 2 screws C (T3x6) to remove the Noise filter.
5. Remove screw D (T3x6) to remove the PBS Duct.
6. Remove 4 screws E (T3x10) and 3 screws F (T3x6) to remove the Duct Top and the Noise filter spacer sheet.
7. Remove screw G (T3x8) to remove the fans (FN903 and FN904), Remove the LCD Panel Duct Top and LCD Panel Duct Bottom .

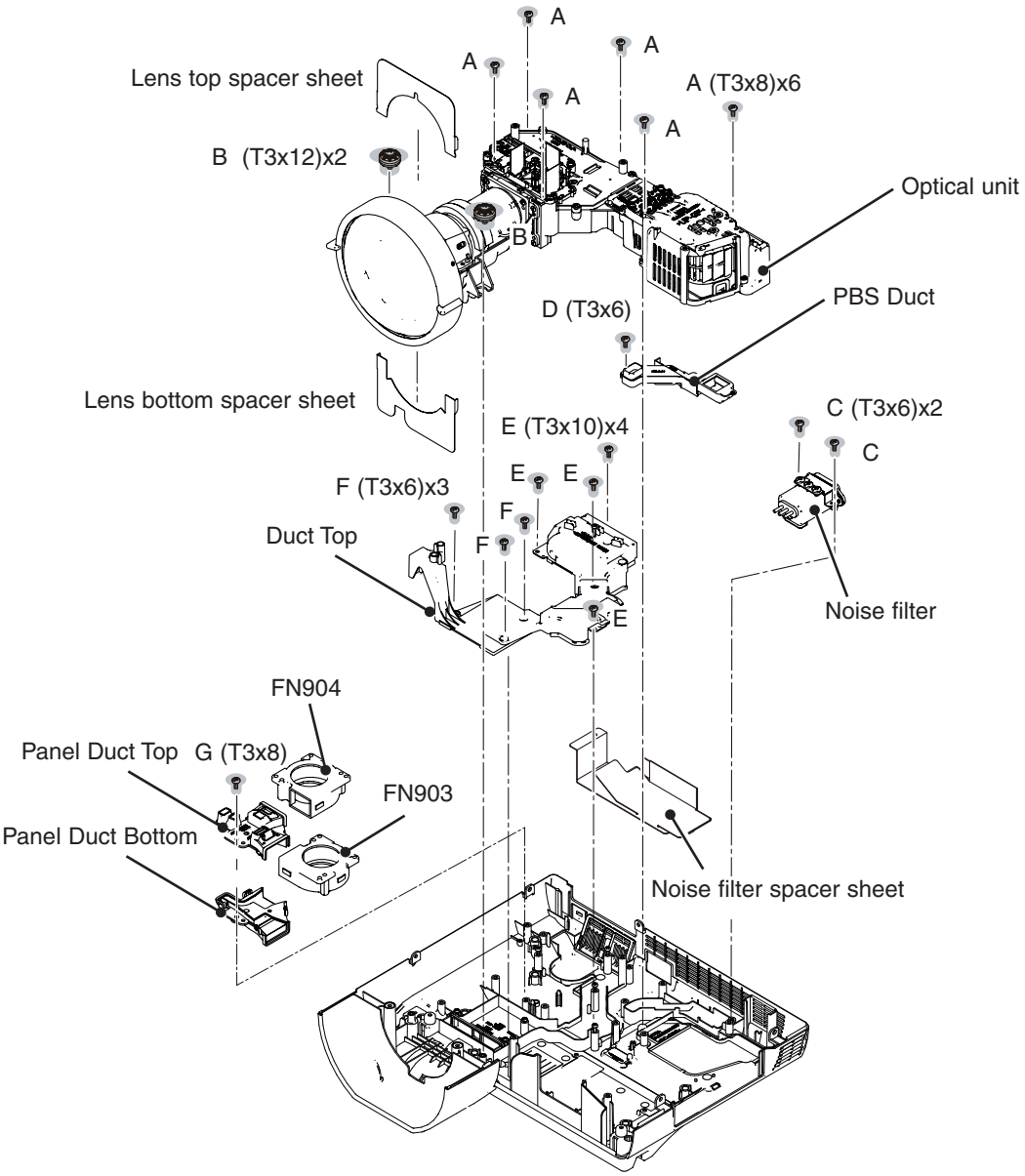


Fig.4

Optical Parts Disassembly

Before taking this procedure, remove Cabinet Top, Main Board and the Lamp Spacer Sheet following to the "Mechanical Disassembly".
Disassembly requires a 2.0 mm hex wrench.

1. Projection lens removal

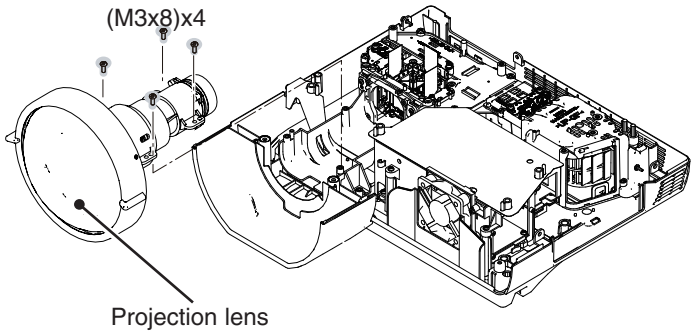
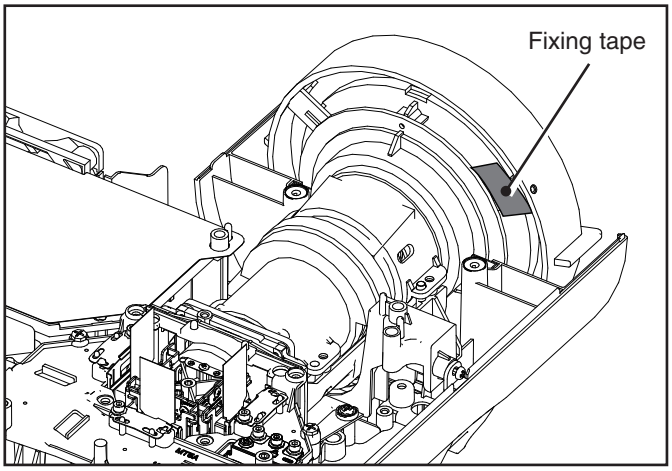


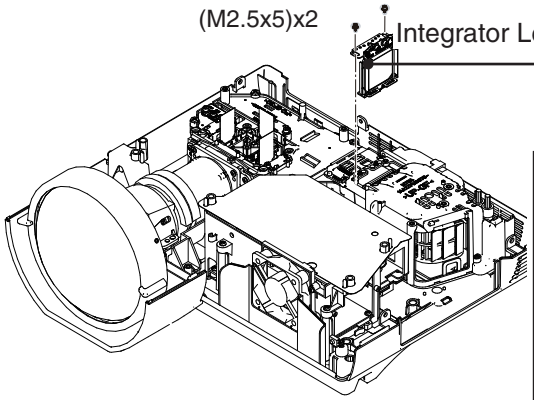
Fig.1

Note on replacing the Projection Lens
- When the Projection Lens is replaced with the new one and reassembled, please make the lens near the side to the Prism and fix it.



Note on replacing the Projection Lens
- When the Projection Lens is replaced with the new one, make sure that the fixing tape must be removed as the figure.

2. Integrator lens-in disassembly



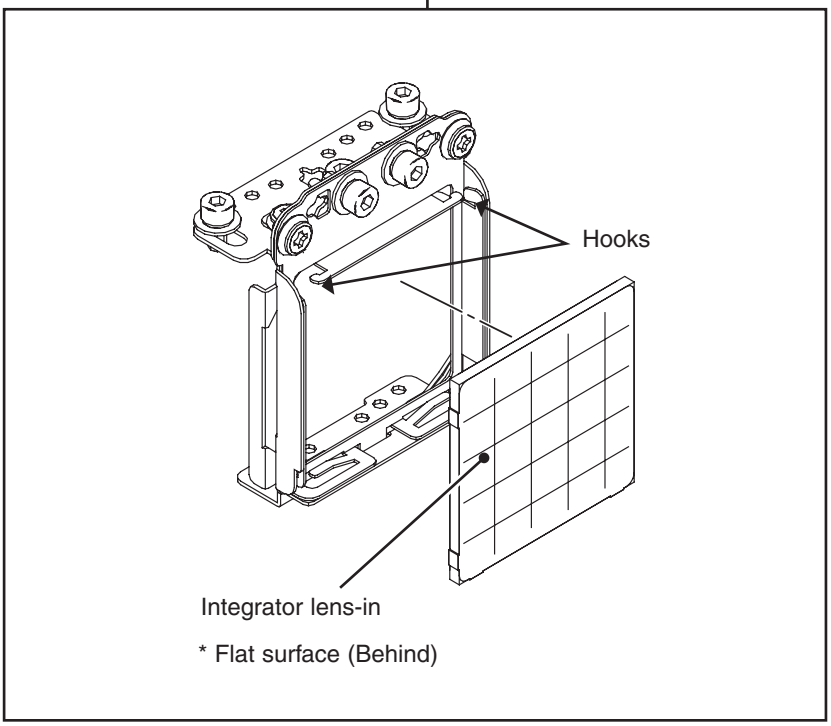


Fig.2

3. Relay lens disassembly

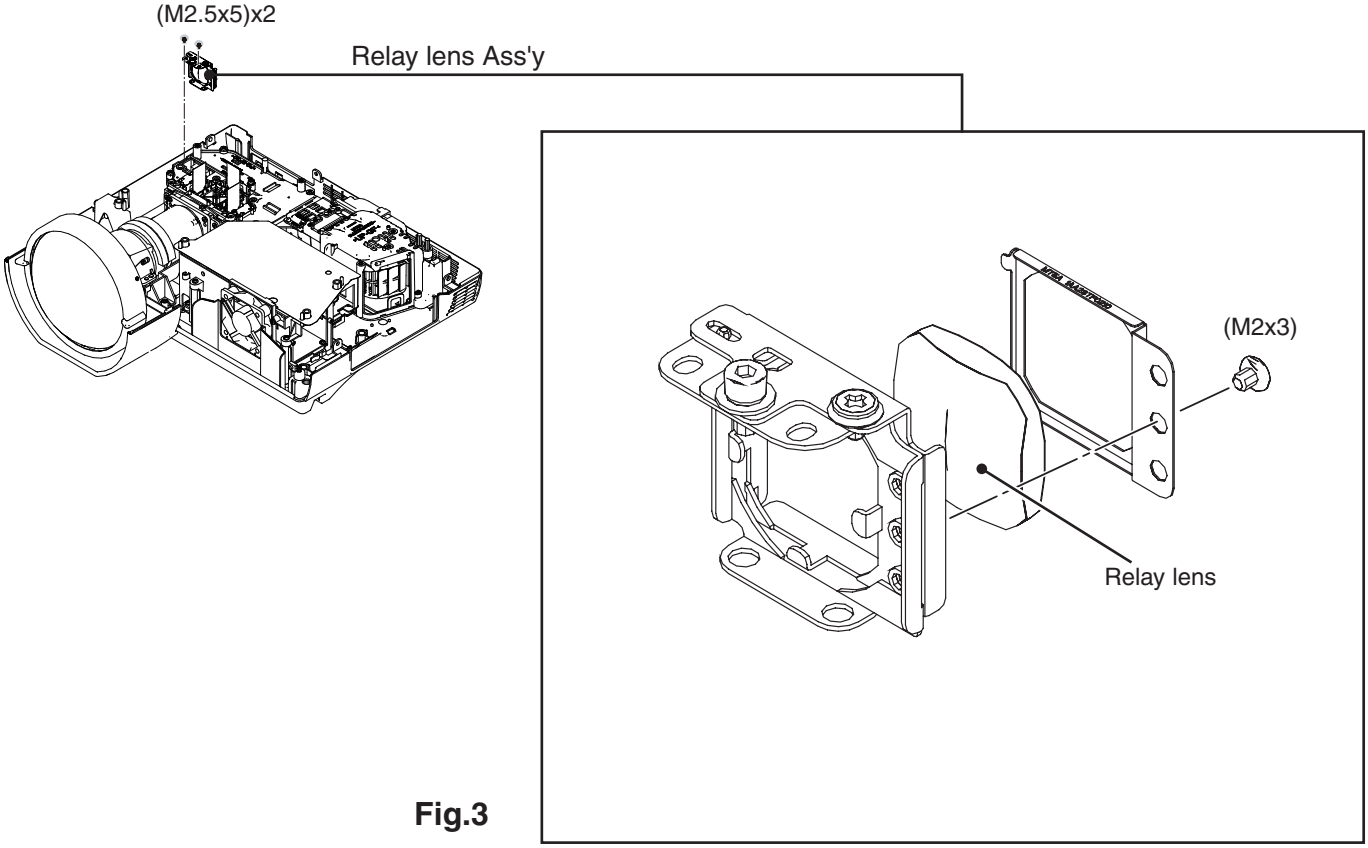


Fig.3

4. Polarized glass-in disassembly

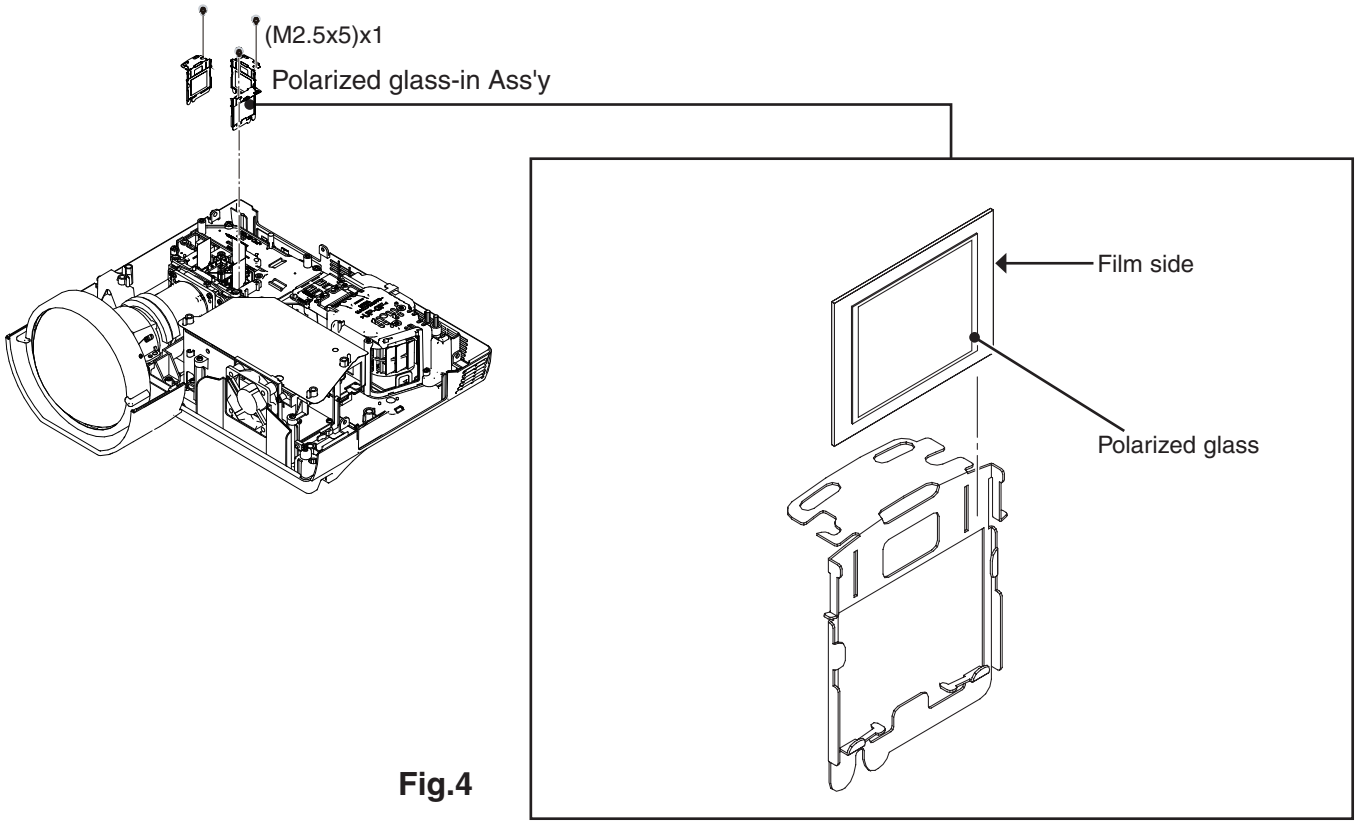


Fig.4

5. LCD Panel/Prism Ass'y removal

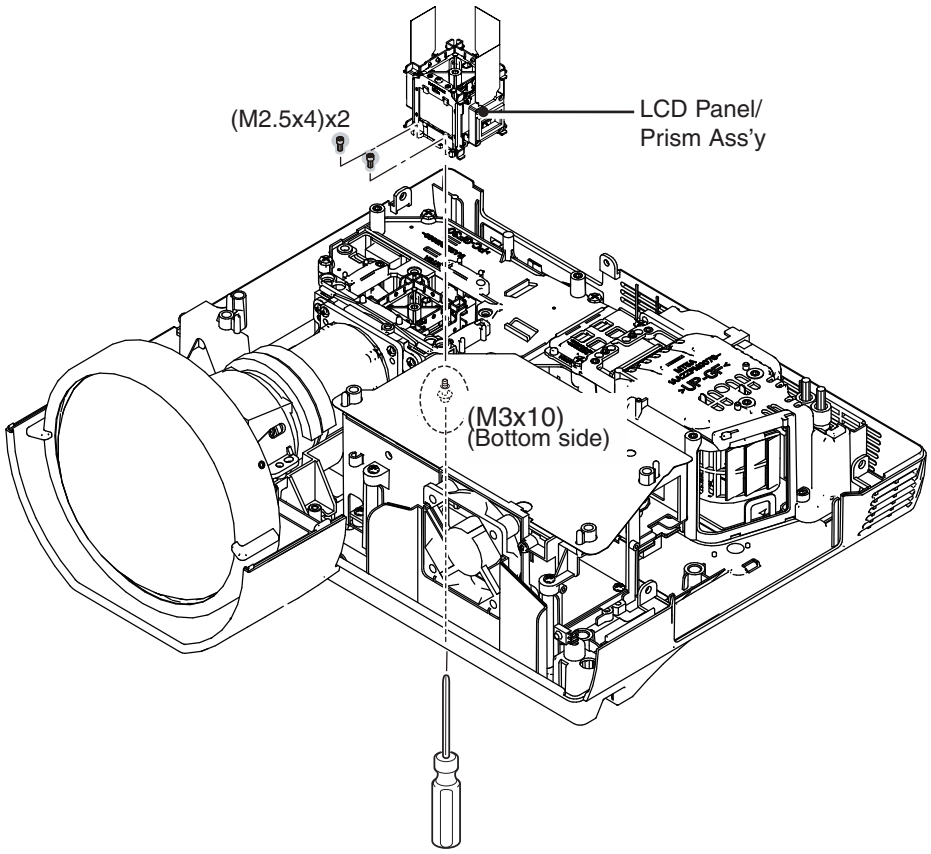


Fig.5

IMPORTANT NOTICE on LCD Panel/Prism Ass'y Replacement

LCD panels used for this model can not be replaced separately. Do not disassemble the LCD Panel/Prism Ass'y. These LCD panels are installed with precision at the factory. When replacing the LCD panel, should be replaced whole of the LCD panels and prism ass'y at once.

After replacing LCD Panel/Prism ass'y, please check the following points.

- Check that there is no color shading at the top, bottom, left or right of the screen. If there is, try to remove the shading following to the chapter "Optical Adjustment".
- Check the white balance. If it needs the adjustment, adjust the white balance following to the "White Balance Adjustment" , "Gamma Adjustment" and "Common Centre Adjustment" in the chapter "Electrical Adjustment".
- Check the white uniformity on the screen.
  If you find the color shading at the some part of the screen, it needs to take the color shading adjustment. This adjustment should be performed by a computer and it also requires a special software "Color Shading Correction". The software will be supplied separately and can be ordered as follows;

COLOR SHADING CORRECTION Ver. 4.00
Service Parts No. 645 075 9611

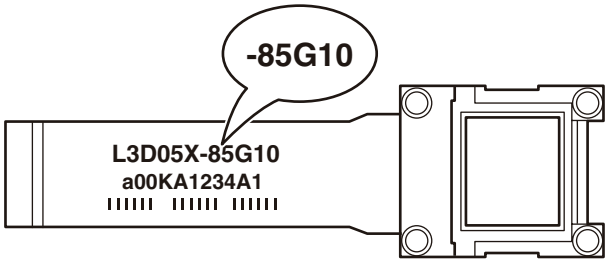
Panel Type Check

There are 2 types of LCD/Prism Ass'y for this model. Either L-Type or R-Type LCD /Prism Ass'y is used on the projector. Check which type of LCD/Prism Ass'y is used with the figure below.
When replacing the LCD/Prism Ass'y, you need to take "Panel Type Check and Setting" on the Electrical Adjustment for the replaced LCD/Prism Ass'y.
The gamma-characteristics is different between L-Type and R-Type LCD /Prism Ass'y.

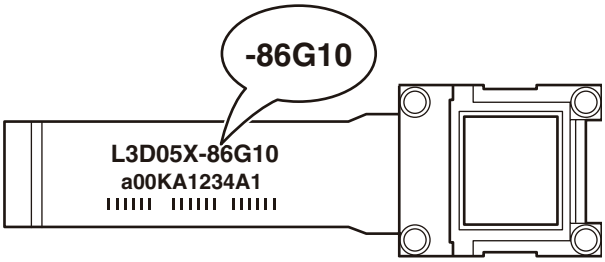
How to check the type of LCD/Prism Ass'y

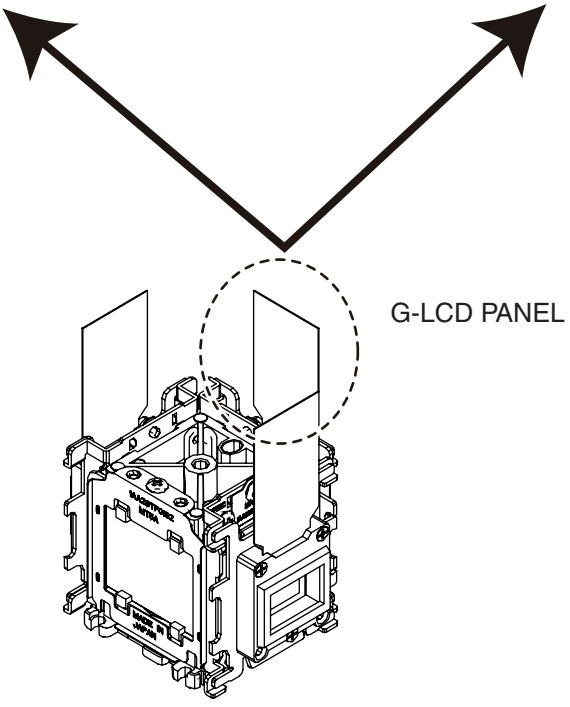
Check the printed number on the flat cable of the G-LCD Panel.

L-Type LCD/Prism Ass'y



R-Type LCD/Prism Ass'y





6. Polarized glass, Pre-polarized glass removal

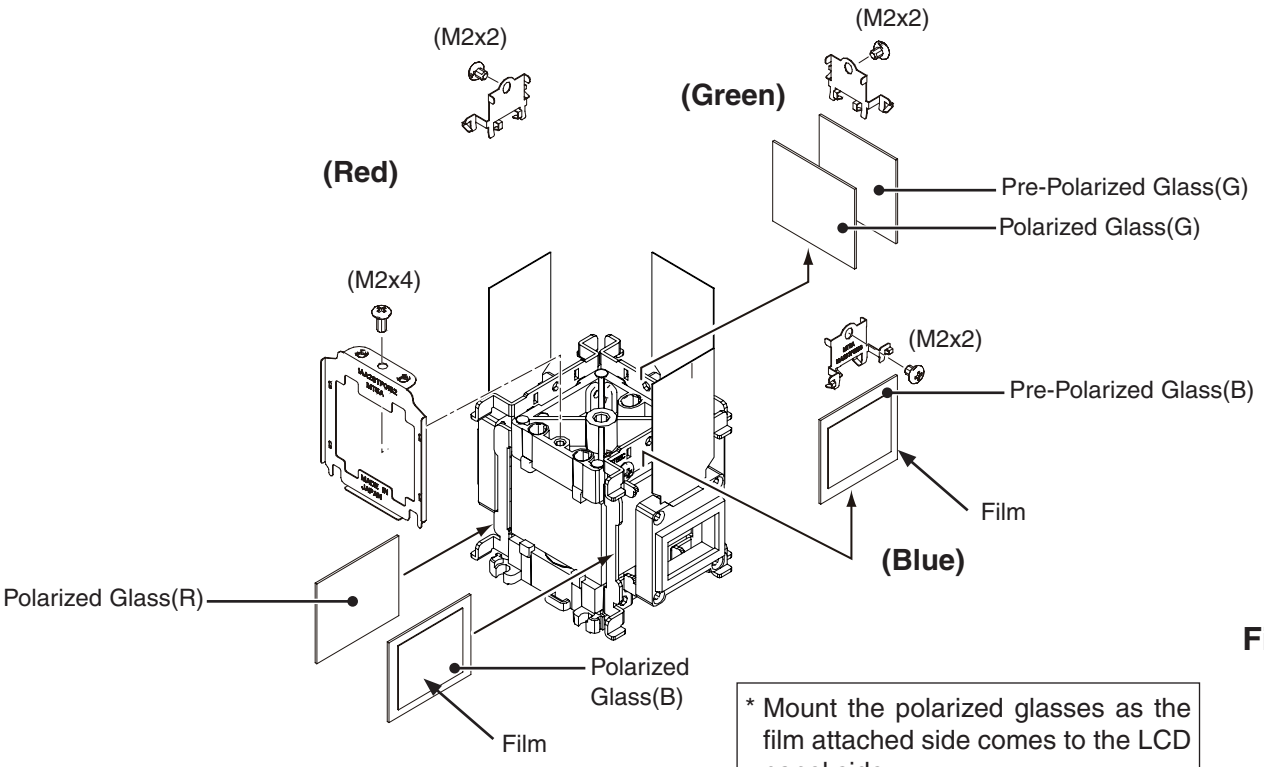


Fig.6

* Mount the polarized glasses as the film attached side comes to the LCD panel side.

7. Optical Unit Top removal

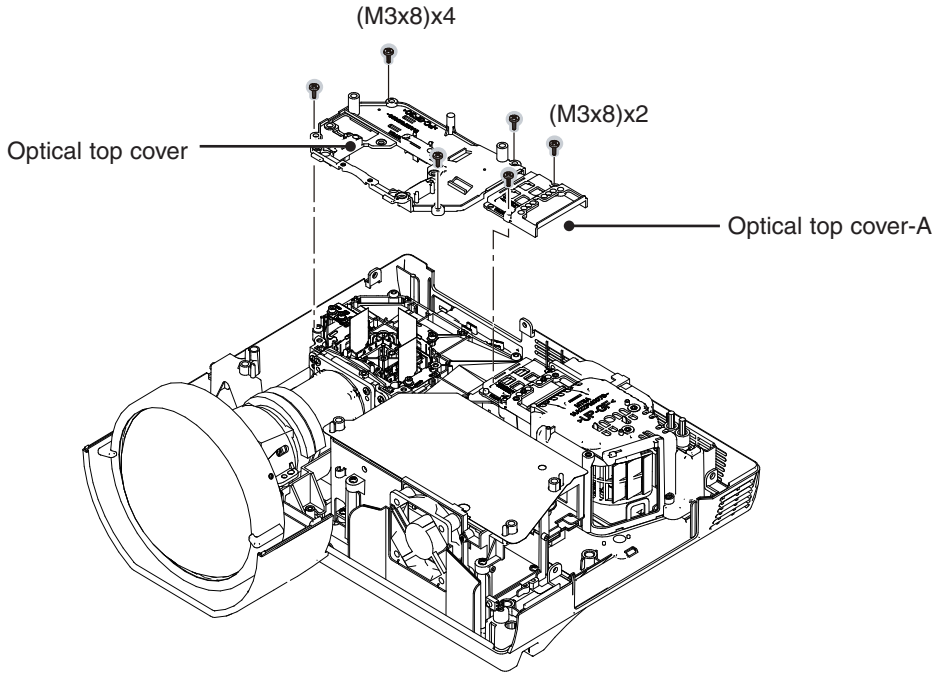


Fig.7

8. Locations and Directions

When mounting or assembling the optical parts in the optical unit, the parts must be mounted in the specified location and direction as shown in figure below.

No.	Parts Name
1	Integrator lens (OUT)
2	Prism beam splitter (PBS)
3	Condenser lens (OUT)
4	Dichroic mirror (B)
5	Dichroic mirror (G)
6	Condenser lens (G)
7	Mirror (R)
8	Condenser lens (R)
9	Condenser lens (B)
10	Mirror (B)

The arrows in the figure indicate the mount direction of the part for the replacement. Check the number on the arrows and mount each part according to its note;
A: The printed part no. comes to this side.
B: Flat surface comes to this side.

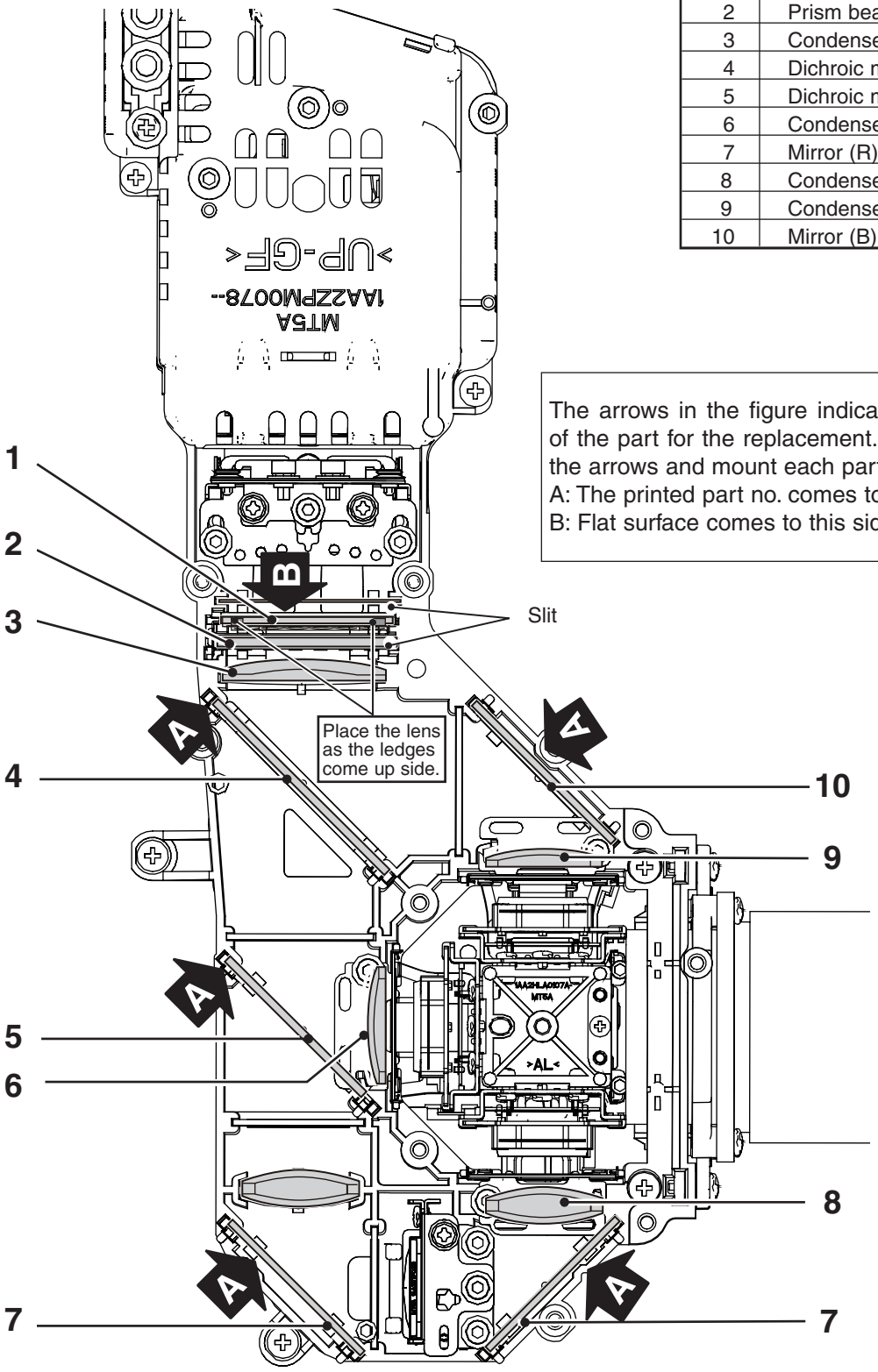


Fig.8

Adjustments

Adjustments after Parts Replacement

● : Adjustment necessary ❍ : Check necessary

		Disassembly / Replaced Parts							
		LCD/ Prism Ass'y	Integrator Lens (OUT)	Relay Lens (OUT)	Polarized Glass			Power Board	Main Board
					R	G	B		
Optical Adjustments	Contrast Adjustment								
	R-Contrast adjustment				●				
	G-Contrast adjustment					●			
	B-Contrast adjustment						●		
	Integrator lens adjustment	❍	●						
	Relay lens-out adjustment	❍		●					
Electrical Adjustments	Fan control adjustment							●	●
	Center Voltage adjustment								●
	Black-Black Voltage adjustment								●
	Panel type check and setting	●							●
	Auto calibration adjustment [PC]								●
	Auto calibration adjustment [Component]								●
	Auto calibration adjustment [Video]								●
	Common center adjustment	●							●
	50% white adjustment [PC]	●							●
	White balance adjustment [PC]	❍							❍
	50% white adjustment [Video]	●							●
	White balance adjustment [Video]	❍							❍
	White uniformity adjustment	❍							❍
	Color Shading Correction adjustment	❍							❍

Optical Adjustments

Before taking optical adjustments below, remove the Cabinet Top and the Lamp Spacer Sheet following to the "Mechanical Disassembly".
Adjustments require a 2.0mm hex wrench and a slot screwdriver. When you adjust Integrator lens or Relay lens adjustment, you need to disconnect FPC cables of LCD panels on the main board.
Optical adjustment requires a 2.0mm hex wrench and a slot screwdriver.
Note: Do not disconnect connectors on the main board, because the projector cannot turn on due to operate the power failure protection.

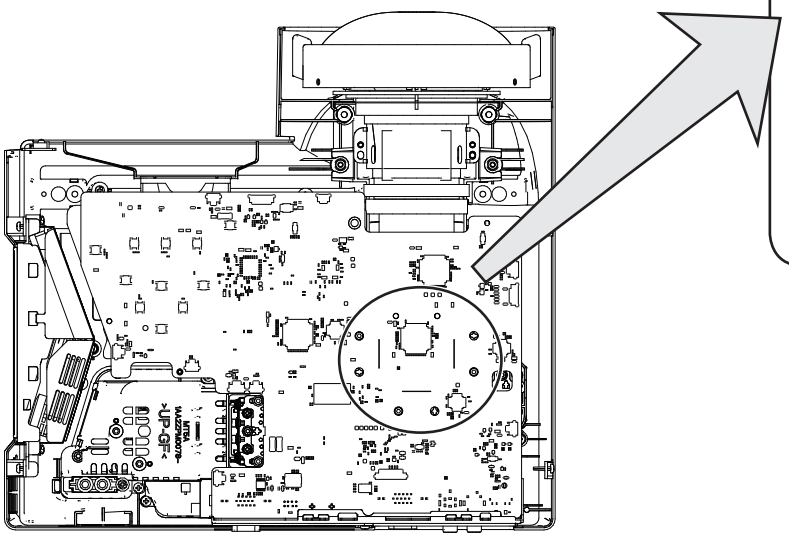
WARNING : USE UV RADIATION EYE AND SKIN PROTECTION DURING SERVICING

CAUTION: To prevent suffer of UV radiation, those adjustment must be completed within 25 minutes.

[Before Adjustment]
- Input a 100% of black raster signal.

1 Loosen a screw **A (Fig.1)** on the polarized glass mounting base which you intend to adjust.
2 Adjust the slot **B** to obtain the darkest brightness on the screen by using a slot screwdriver.
3 Tighten the screw **A** to fix the polarized glass mounting base.

Repeat steps 1 to 3 for remaining polarized glasses.



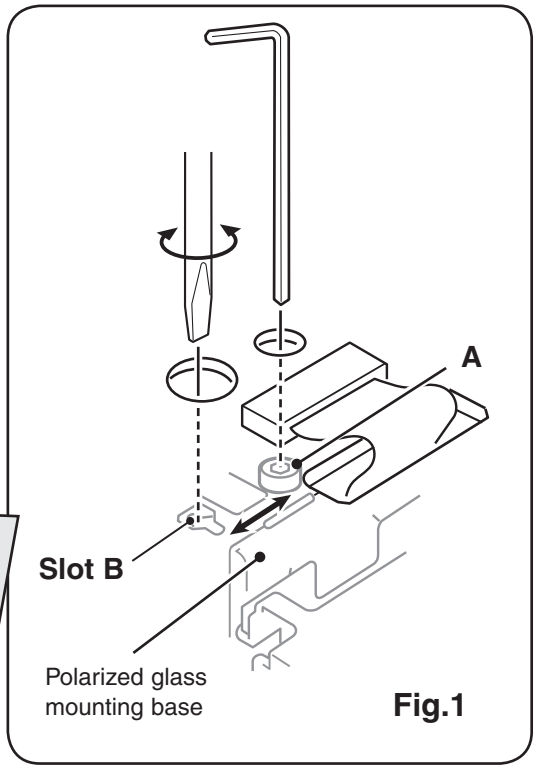
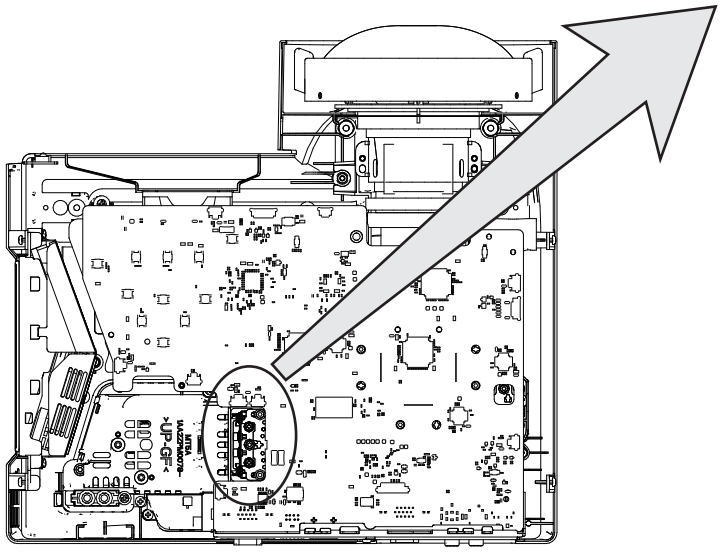


Fig.1

Integrator lens adjustment

1 Turn the projector on by a state of without FPC cables.
2 Project all of lights on the screen.
3 Adjust the adjustment base of integrator lens assy to make color uniformity in white.
1) If the shading appears on the left or right of the screen as shown in **Fig.2-1**, loosen 1 screw **A** , and adjust the slot **B** to make color uniformity in white by using a slot screwdriver.
2) If the shading appears on the top or bottom of the screen as shown in **Fig.2-2**, loosen 2 screws **C**, and adjust the slots **D** to make color uniformity in white by using a slot screwdriver
4 Tighten screws **A** and **C** to fix the Integrator lens unit.

Note:
The relay lens adjustment must be carried out after completing this adjustment.



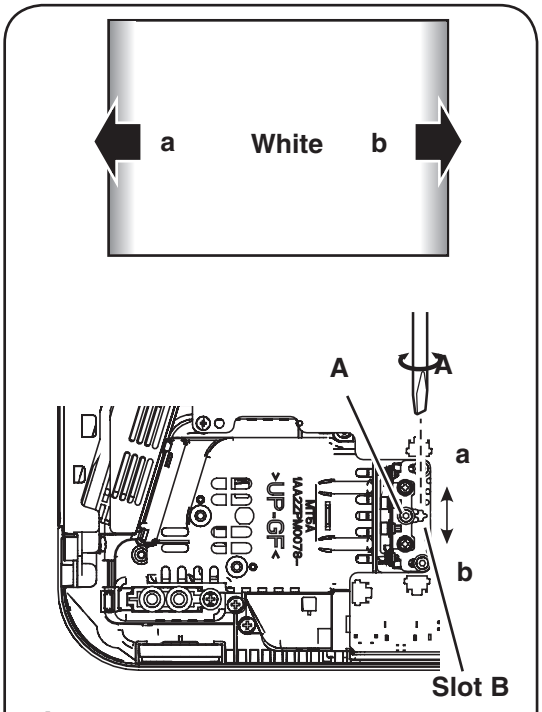


Fig.2-1
Moving of slot B

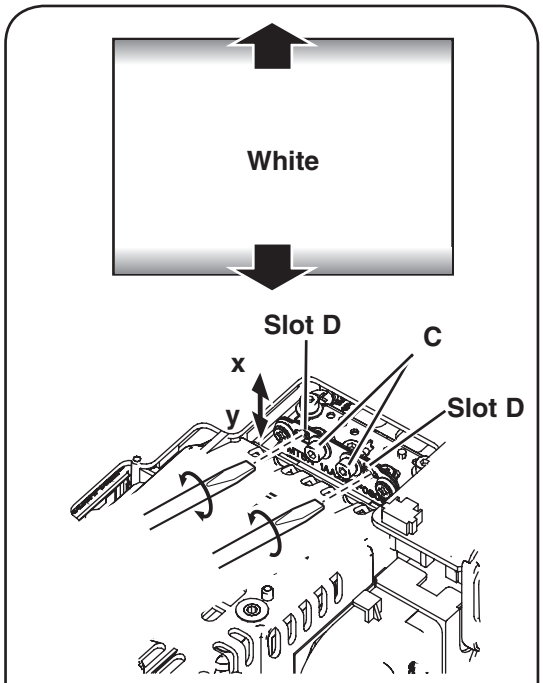
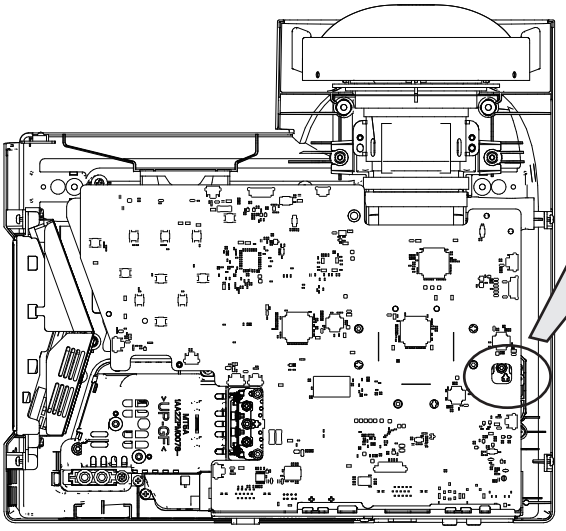


Fig.2-2
Moving of Slot D

Relay lens-Out adjustment

1 Turn the projector on by a state of without FPC cables.
2 Project all of lights on the screen.
3 Adjust the adjustment base of relay lens assy to make color uniformity in white.
If the shading appears on the left or right of the screen as shown in **Fig.3**, loosen 1 screw **A**, and adjust the slot **B** to make color uniformity in white by using a slot screwdriver.
4 Tighten the screws **A** to fix the relay lens unit.



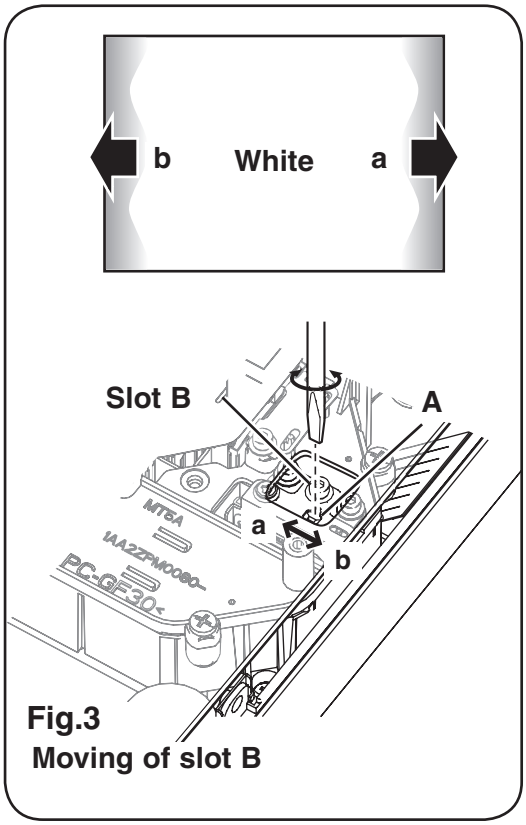


Fig.3
Moving of slot B

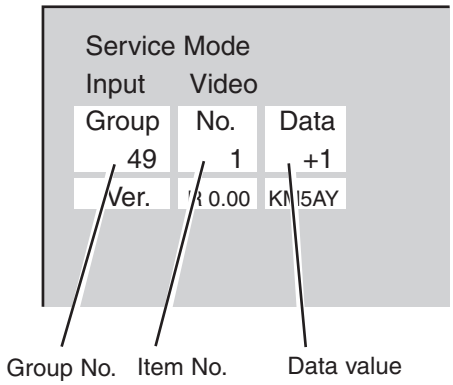
Electrical Adjustments

Service Adjustment Menu Operation

To enter the service mode
To enter the “Service Mode”, press and hold the **MENU button** on the remote control or on the top control for more than 20 seconds. The service menu appears on the screen as follows.

To adjust service data
Select the adjustment group no. by pressing the ▲ or ▼ **button** on the remote control, and select the adjustment item no. by pressing the pointer ▲ or ▼ **button**, and change the data value by pressing the ◀ or ▶ **button**. Refer to the “Service Adjustment Data Table” for further description of adjustment group no., item no. and data value.

To exit the service mode
To exit the service mode, press the **ON-OFF button** on the remote control.



Memory IC (IC1391) Replacement

Memory IC on the main board stores the data for the service adjustments, and should not be replaced except for the case of defective device.
If replaced, the re-adjustments are required following to the “Electrical Adjustments”.
The data of lamp replacement counter is stored in the Memory IC.
Please note that the lamp replace counter will be reset when the memory IC is replaced.
(Lamp replace counter cannot be set to the previous value.)

● **Caution to memory IC replacement**
When memory IC is replaced with new one, the CPU writes down the default data of the service adjustments to the replaced IC as the mentioned on the service adjustment table. As these data are not the same data as factory shipped data, it should be required to perform the re-adjustments following to the “Electrical Adjustments”.
Please note that in this case the lamp replace counter will be reset.

● **Caution of Main Board replacement (in the case memory IC is not defective)**
When the main board is replaced, memory IC should be replaced with the one on previous main board. After replacement, it should be required to perform the re-adjustments following to the “Electrical Adjustments”.
In this case, the lamp replace counter can be kept the value as before.

Circuit Adjustments

CAUTION: The each circuit has been made by the fine adjustment at factory. Do not attempt to adjust the following adjustments except requiring the readjustments in servicing otherwise it may cause loss of performance and product safety. Before adjustment, please turn on the projector more than ten minutes.

WARNING : USE UV RADIATION EYE AND SKIN PROTECTION DURING SERVICING.

CAUTION:
To prevent suffer of UV radiation, those adjustments must be completed within 25 minutes.

[Adjustment Condition]

- Input signal

Video signal .....1.0Vp-p/75Ω terminated, 16 steps gray scale (Composite video signal)

Component Video signal.....1.0Vp-p/75Ω terminated, 8 color 100% color bar or 16 step gray scale (Component video signal)

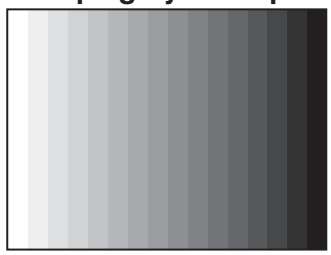
Computer signal.....0.7Vp-p/75Ω terminated, 16 steps gray scale pattern

- Image control mode .....“STANDARD” mode unless otherwise noted.

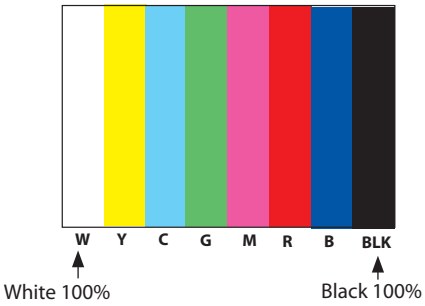
Note:

* Please refer to “Service Adjustment Menu Operation” for entering the service mode and adjusting the service data.

16 steps gray scale pattern



8 color 100% color bar



Output Voltage adjustment

After replacing the Power Board readjust the Output voltage adjustment as follows.

1. Connect a digital voltmeter to pins 1 (+) and 3 (-) of **K6D**.
2. Adjust the voltage by using VR611 as following.

AC Input	Reading
230V	380V ±2V

Caution:

Be sure to connect the lamp when taking this adjustment.

* This adjustment is not required even if the power board is replaced because this adjustment is carried out before parts shipment.

1.Fan Control adjustment

1. Enter the service mode.
2. Connect a digital voltmeter to test point “**TPFANA**” (+) and chassis ground (-). Select group no. “**250**”, item no. “**0**” and change data value to adjust voltage to be **5.0 ±0.1V**.
3. Connect a digital voltmeter to test point “**TPFANB**” (+) and chassis ground (-). Select group no. “**250**”,item no. “**2**” and change data value to adjust voltage to be **6.2 ±0.1V**.
4. Connect a digital voltmeter to test point “**TPFANA**” (+) and chassis ground (-). Select group no. “**250**”,item no. “**1**” and change data value to adjust voltage to be **13.5 ±0.1V**.
5. Connect a digital voltmeter to test point “**TPFANB**” (+) and chassis ground (-). Select group no. “**250**”,item no. “**3**” and change data value to adjust voltage to be **13.5 ±0.1V**.

2 .Center Voltage Adjustment

1. Enter the service mode.
2. Select group no. "**101**", item no. "**12**" to adjust the voltage of **TP_VMIDG** to be **7.50 ±0.01V**.

3 .Black-Black Voltage Adjustment

1. Enter the service mode.
2. Receive the 16-step grey scale computer signal with **Computer 1 [RGB]** mode.
3. Select group no. "**101**", item no. "**13**" to adjust the voltage of **TP_VERFR** to make the voltage to be **10.00 ±0.05V**.
4. Select group no. "**101**", item no. "**14**" to adjust the voltage of **TP_VERFG** to make thevoltage to be **10.00 ±0.05V**.
5. Select group no. "**101**", item no. "**15**" to adjust the voltage of **TP_VERFB** to make the voltage to be **10.00 ±0.05V**.

4. Panel Type Check and Setting

* Before setting, you need to check which type of LCD panel is placed on the projector according to the item "LCD Panel/Prism Ass'y removal" in the chapter "Optical Parts Disassembly".

1. Enter the service mode.
2. Panel Type Check
   Select group no. "**290**", item no. "**0**". Check the data value as follows;
   Data value: 0 For L-Type of LCD Panel
   Data value: 20 For R-Type of LCD panel
3. Panel Type Setting
   Select group no. "**290**", item no. "**1**" and change data value from 10 to 0 or 20 depending on your LCD Panel type. When the data value reaches 0 or 20, it returns to 10 quickly. The gamma-characteristics changes according to your selection.

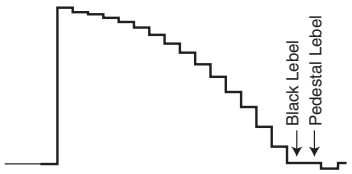
5. Auto Calibration adjustment [PC]

1. Enter the service mode.
2. Receive the 16-step grey scale computer signal with **Computer1 [RGB]** mode.
3. To start the auto-calibration for PC adjustment, select group no. "**260**", item no. "**0**" and then change data value from "**0**" to "**1**". After the auto-calibration completed, "OK" will appear on the screen.

Below adjustments are performed when the above auto calibration is failed.

Pedestal adjustment [PC]

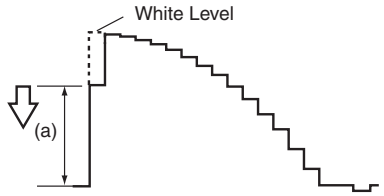
1. Enter the service mode.
2. Receive the 16-step grey scale computer signal with **Computer1 [RGB]** mode.
3. Connect an oscilloscope to test point "**TP35G**" (+) and chassis ground (-).
4. Select group no. "**0**", item no. "**0**" and change data value to adjust the pedestal level and black level to be the same level.
5. Connect an oscilloscope to test point "**TP35R**" (+) and chassis ground (-).
6. Select item no. "**1**" and change data value to adjust the pedestal level and black level to be the same level.
7. Connect an oscilloscope to test point "**TP35B**" (+) and chassis ground (-).
8. Select item no. "**2**" and change data value to adjust the pedestal level and black level to be the same level.



Gain adjustment [PC]

1. Enter the service mode.
2. Receive the 16-step grey scale computer signal with **Computer1 [RGB]** mode.
3. Connect an oscilloscope to test point "**TP35G**" (+) and chassis ground (-).
4. Select group no. "**0**", item no. "**3**" and adjust the amplitude "**a**" to be minimum by changing the Data value.
5. Connect an oscilloscope to test point "**TP35R**" (+) and chassis ground (-).

6. Select group no. "**0**", item no. "**4**" and adjust the amplitude "**a**" to be minimum by changing the Data value.
7. Connect an oscilloscope to test point "**TP35B**" (+) and chassis ground (-).
8. Select group no. "**0**", item no. "**5**" and adjust the amplitude "**a**" to be minimum by changing the Data value.



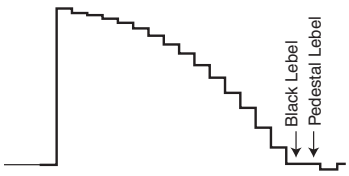
6. Auto Calibration adjustment [Component]

1. Enter the service mode.
2. Receive the 8 color 100% color bar 480i-component signal with **Computer1 [Component]** mode.
3. To start the auto-calibration for Component adjustment, select group no. "**260**", item no. "**0**" and then change data value from "**0**" to "**1**". After the auto-calibration completed, "OK" will appear on the screen.

Below adjustments are performed when the above auto calibration is failed.

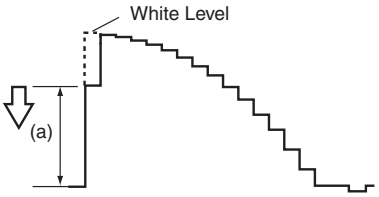
Pedestal adjustment [Component]

1. Enter the service mode.
2. Receive the 16-step grey scale 480i-component signal with **Computer1 [Component]** mode.
3. Connect an oscilloscope to test point "**TP35G**" (+) and chassis ground (-).
4. Select group no. "**0**", item no. "**0**" and change data value to adjust the pedestal level and black level to be the same level.
5. Connect an oscilloscope to test point "**TP35R**" (+) and chassis ground (-).
6. Select item no. "**1**" and change data value to adjust the pedestal level and black level to be the same level.
7. Connect an oscilloscope to test point "**TP35B**" (+) and chassis ground (-).
8. Select item no. "**2**" and change data value to adjust the pedestal level and black level to be the same level.



Gain adjustment [Component]

1. Enter the service mode.
2. Receive the 16-step grey scale computer signal with **Computer1 [RGB]** mode.
3. Connect an oscilloscope to test point "**TP35G**" (+) and chassis ground (-).
4. Select group no. "**0**", item no. "**3**" and adjust the amplitude "**a**" to be minimum by changing the Data value.
5. Connect an oscilloscope to test point "**TP35R**" (+) and chassis ground (-).
6. Select group no. "**0**", item no. "**4**" and adjust the amplitude "**a**" to be minimum by changing the Data value.
7. Connect an oscilloscope to test point "**TP35B**" (+) and chassis ground (-).
8. Select group no. "**0**", item no. "**5**" and adjust the amplitude "**a**" to be minimum by changing the Data value.



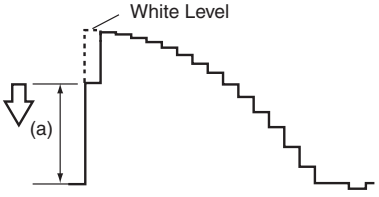
7. Auto Calibration adjustment [Video]

1. Enter the service mode.
2. Receive the 16-step grey scale composite video signal with **Video [Video]** mode.
3. To start the auto-calibration for Component adjustment, select group no. "**260**", item no. "**0**" and then change data value from "**0**" to "**1**". After the auto-calibration completed, "OK" will appear on the screen.

below adjustment is performed when the above auto calibration is failed.

Gain adjustment [Video]

1. Enter the service mode.
2. Receive the 16-step grey scale composite video signal with **Video [Video]** mode.
3. Connect an oscilloscope to test point "**TP35G**" (+) and chassis ground (-).
4. Select group no. "**20**", item no. "**0**" and adjust the amplitude "**a**" to be minimum by changing the Data value.

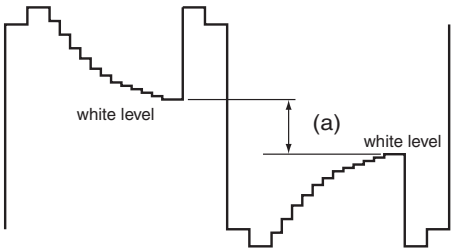


8. Common Center adjustment

1. Enter the service mode.
2. Receive the 50%-Whole Gray computer signal with **Computer1 [RGB]** mode.
3. Select group no. "**100**", item no. "**92**" and change data value to "**2**" to reduce the panel frequency.
4. Project only green light component to the screen.
5. Select group no. "**101**", item no. "**1**" and change data value to obtain the minimum flicker on the screen.
6. Project only red light component to the screen.
7. Select item no. "**0**" and change data value to obtain the minimum flicker on the screen.
8. Project only blue light component to the screen.
9. Select item no. "**2** and change data value to obtain the minimum flicker on the screen.
10. Select group no. "**100**", item no. "**92**" and change data value to "**0**" to reset the panel frequency.

9. 50% White adjustment [PC]

1. Enter the service mode.
2. Receive the 16-step grey scale computer signal with **Computer1 [RGB]** mode.
3. Connect an oscilloscope to test point "**TP35G**" (+) and chassis ground (-).
4. In Standard mode, select group no. "**100**", item no. "**235**" and change data value to "**0**".
5. Select group no. "**100**", item no. "**6**" and change data value to adjust amplitude "**a**" to be **1.6V**.
6. select group no. "**100**", item no. "**235**" and change data value to "**1**".



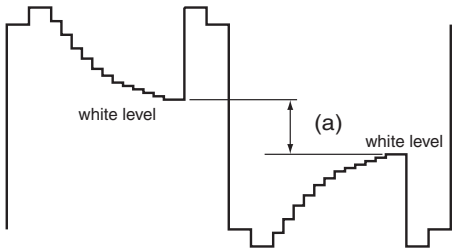
10. White Balance adjustment [PC]

1. Enter the service mode,
2. Receive the 16-step gray scale computer signal with **Computer1 [RGB]** mode.
3. Select group no. "**100**" item no. "**7**" (Red) or "**8**" (Blue), and change Data values respectively to make a proper white balance.

Confirm that the same white balance is obtained in video and computer input.

11. 50% White adjustment [Video]

1. Enter the service mode.
2. Receive the 16-step grey scale composite video signal with **Video[Video]** mode.
3. Connect an oscilloscope to test point "**TP35G**" (+) and chassis ground (-).
4. In Standard mode, select group no. "**100**", item no. "**235**" and change data value to "**0**".
5. Select group no. "**100**", item no. "**6**" and change data value to adjust amplitude "**a**" to be **0.85V**.
6. select group no. "**100**", item no. "**235**" and change data value to "**1**".



12. White Balance adjustment [Video]

1. Enter the service mode.
2. Receive the 16-step grey scale composite video signal with **Video[Video]** mode.
3. Select group no. "**100**" item no. "**7**" (Red) or "**8**" (Blue), and change Data values respectively to make a proper white balance.

Confirm that the same white balance is obtained in video and computer input.

13. Color Shading Correction adjustment

If the correction of the Color shading adjustment is necessary, please adjust the "Color shading" by using the "COLOR SHADING CORRECTION" software supplied separately.
The color shading correction adjustment for this model should be performed with the whole-gray patterns specified as below.

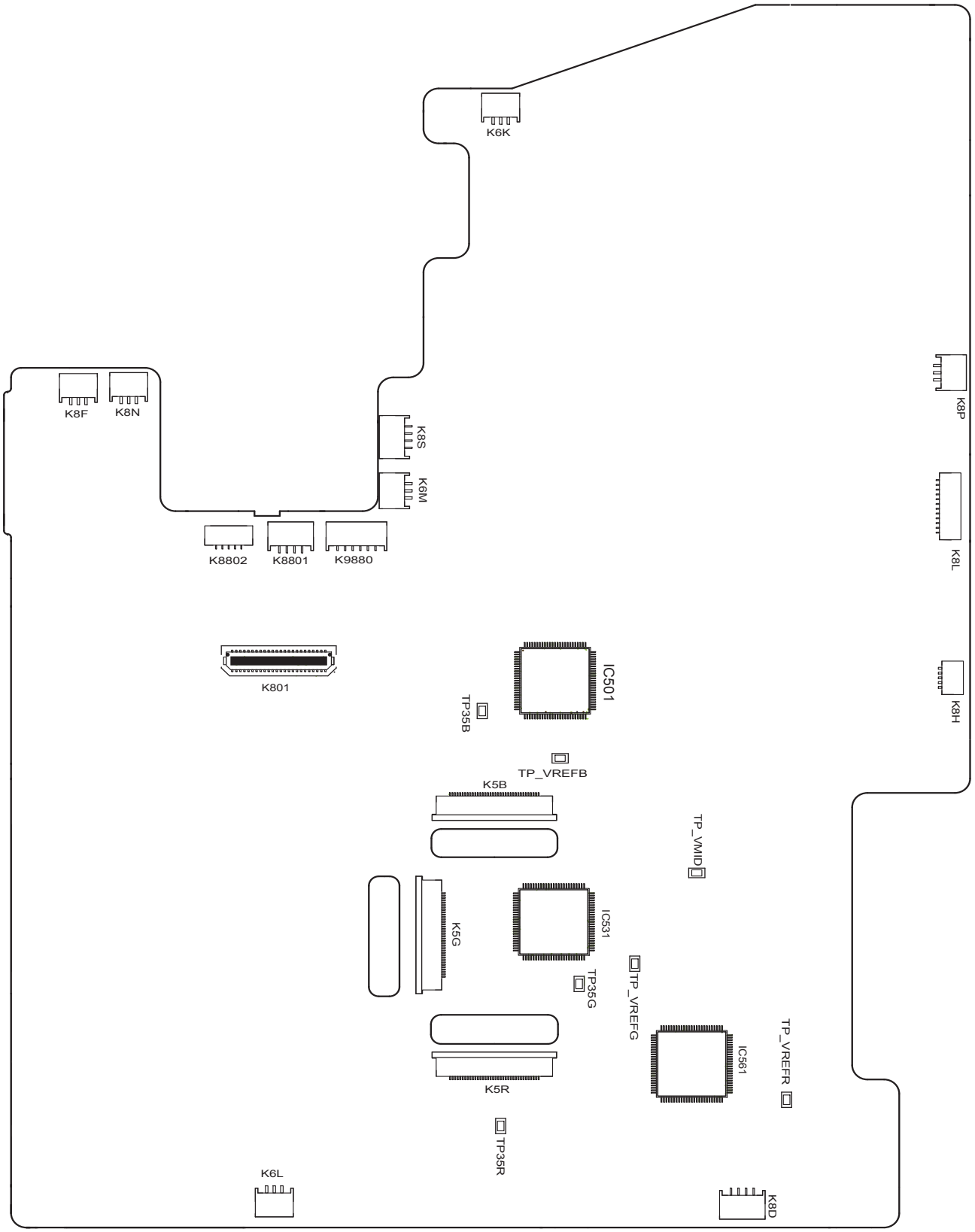
4-input patterns:
6% gray, 12.5% gray, 25% gray, 50% gray

The Color Shading Correction can be ordered with following service code.

COLOR SHADING CORRECTION Ver. 4.00	
Service Parts No.	645 075 9611

Test Points and Locations

MAIN BOARD



Service Adjustment Data Table

These initial values are the reference data written from the CPU ROM to memory IC when replaced new memory IC. The adjustment items indicated with "*" are required to readjust following to the "Electrical adjustments". Other items should be used with the initial data value.

Group/ Item	Item Name	Function	Initial	Range	Note
Group 0	**AD Converter (PW190)**				
0	ADC G-OFFSET	PC / Component / SCART	128/120/128	0 - 255	* G-Pedestal Adjustment
1	ADC R-OFFSET	PC / Component / SCART	128/140/128	0 - 255	* R-Pedestal Adjustment
2	ADC B-OFFSET	PC / Component / SCART	128/140/128	0 - 255	* B-Pedestal Adjustment
3	ADC G-GAIN	PC / Component / SCART	50/50/50	0 - 255	* G-Gain Adjustmen
4	ADC R-GAIN	PC / Component / SCART	40/40/40	0 - 255	* R-Gain Adjustmen
5	ADC B-GAIN	PC / Component / SCART	40/40/40	0 - 255	* B-Gain Adjustmen
6	GRAAFLTR/RBAAFLTR	Green (Red and Blue) Anti-Alias Filter	4 / R / R	0 - 7	
7	GRNAADWNSMPL / RBAADWNSMPL	Green (Red and Blue) Anti-Alias Downsample	0 / R / R	0 - 3	Composite & S-Video / Component / PC
8	GRNAAHF / RBAAHF	Green (Red and Blue) Anti-Alias High Frequency	3 / R / R	0 - 3	*R: Read only value
10	SOGTH	PC / Component / SCART SyncOn Green Threhould	8 / 8 / 4	0 - 15	
11	SOGHYSDIS	PC / Component / SCART Sync On Green Hsysterisis Enable	0	0 - 1	
12	HS1TH		4	0 - 7	
13	HS0TH		4	0 - 7	
100	PreCoast PC Signal		3	0 - 63	
101	PostCoast PC Signal		8	0 - 63	
120	PreCoast PC Video 480i		7	0 - 63	
121	PostCoast PC Video 480i		13	0 - 63	
122	PreCoast PC Video 575i		7	0 - 63	
123	PostCoast PC Video 575i		13	0 - 63	
124	PreCoast PC Video 480p		7	0 - 63	
125	PostCoast PC Video 480p		13	0 - 63	
126	PreCoast PC Video 575p		7	0 - 63	
127	PostCoast PC Video 575p		13	0 - 63	
128	PreCoast PC Video 720p 60Hz		7	0 - 63	
129	PostCoast PC Video 720p 60Hz		13	0 - 63	
130	PreCoast PC Video 720p 50Hz		7	0 - 63	
131	PostCoast PC Video 720p 50Hz		13	0 - 63	
132	PreCoast PC Video 1080i 60Hz		7	0 - 63	
133	PostCoast PC Video 1080i 60Hz		13	0 - 63	
134	PreCoast PC Video 1080i 50Hz		7	0 - 63	
135	PostCoast PC Video 1080i 50Hz		13	0 - 63	
136	PreCoast PC Video 1035i		7	0 - 63	
137	PostCoast PC Video 1035i		13	0 - 63	
138	PreCoast PC Video 1080p 60Hz		7	0 - 63	
139	PostCoast PC Video 1080p 60Hz		13	0 - 63	
140	PreCoast PC Video 1080p 50Hz		7	0 - 63	
141	PostCoast PC Video 1080p 50Hz		13	0 - 63	
142	PreCoast PC Video 1080p 30Hz		7	0 - 63	
143	PostCoast PC Video 1080p 30Hz		13	0 - 63	
144	PreCoast PC Video 1080p 25Hz		7	0 - 63	
145	PostCoast PC Video 1080p 25Hz		13	0 - 63	
146	PreCoast PC Video 1080p 24Hz		7	0 - 63	
147	PostCoast PC Video 1080p 24Hz		13	0 - 63	

Electrical Adjustments

Group/ Item	Item Name	Function	Initial	Range	Note
150	PreCoast YCbCr 480i		7	0 - 63	
151	PostCoast YCbCr 480i		13	0 - 63	
152	PreCoast YCbCr 575i		7	0 - 63	
153	PostCoast YCbCr 575i		13	0 - 63	
154	PreCoast YCbCr 480p		7	0 - 63	
155	PostCoast YCbCr 480p		13	0 - 63	
156	PreCoast YCbCr 575p		7	0 - 63	
157	PostCoast YCbCr 575p		13	0 - 63	
158	PreCoast YCbCr 720p 60Hz		7	0 - 63	
159	PostCoast YCbCr 720p 60Hz		13	0 - 63	
160	PreCoast YCbCr 720p 50Hz		7	0 - 63	
161	PostCoast YCbCr 720p 50Hz		13	0 - 63	
162	PreCoast YCbCr 1080i 60Hz		7	0 - 63	
163	PostCoast YCbCr 1080i 60Hz		13	0 - 63	
164	PreCoast YCbCr 1080i 50Hz		7	0 - 63	
165	PostCoast YCbCr 1080i 50Hz		13	0 - 63	
166	PreCoast YCbCr 1035i		7	0 - 63	
167	PostCoast YCbCr 1035i		13	0 - 63	
180	PreCoast SCART 480i		7	0 - 63	
181	PostCoast SCART 480i		13	0 - 63	
182	PreCoast SCART 575i		7	0 - 63	
183	PostCoast SCART 575i		13	0 - 63	
Group 10	**Sync Processor**				
0	SYNCAMPHLCKTOLOW	Minimum sync amplitude threshold for HLCK 1 to 0 tansition	0x1000	0 - 9999	
1	SYNCAMPHLCKTOHI	Minimum sync amplitude threshold for HLCK 0 to 1 tansition	0x700	0 - 9999	
Group 20	**Video Decoder** *R : Read Only Value				
0	Y Level	Composite / S-Video - Y Level (ADC RGB Gain)	10 / 10	0 - 255	Composite / S-Video * Gain Adjustment [Video]
1	C Level	Composite / S-Video - C Level (ADC Saturation)	115 / 115	0 - 255	Composite / S-Video
2					
3	XCXL Level	Cross-Chroma, Cross-Luma Level	3	0 - 5	
4	C2DNBANDWIDTH	Comb 2D Narrow Bandwidth	3 / 3	0 - 3	NTSC/PAL
5	C2DWBANDWIDTH	Comb 2D Wide Bandwidth	4 / 4	0 - 7	NTSC/PAL
6	C2DCNMINLEAK	Comb 2D Chroma Narrow Band Minimum Leakage	0 / 3	0 - 3	Left Values are adjustable if CXCL Level = 5.
7	C2DCNSLOPELEAK	Comb 2D Narrow Band Slope Leakage	7 / 7	0 - 7	NTSC/PAL
8	C2DCWMINLEAK	Comb 2D Wide Band Minimum Leakage	1 / 3	0 - 3	NTSC/PAL
9	C2DCWSLOPELEAK	Comb 2D CW Slope Leakage	6 / 6	0 - 7	NTSC/PAL
10	COMBLEAK2BPGAIN	Comb Leak To Ban Pass Gain	1 / 0	0 - 3	NTSC/PAL
11	C2DBDIAGONALGAIN	Comb 2D Band Pass Diagonal Gain	1 / 3	0 - 3	NTSC/PAL
12	C2DNBCWBCLGAIN	Comb 2D Narrow Band Comb Wide Band Comb	1 / 1	0 - 3	NTSC/PAL
13	RLUMASETUP-Enable	7.5IRE Setup Enable	0	0 - 1	Effective only NTSC Signal
Group 40	**General**				
0	IP Mode	Sets for IP Off	1	0 - 1	0: IP Block not used 1: IP OFF used with IP Block
1	3:2 PullDown Mode		1	1 - 3	bit0 : Global Motion bit1 : Video Motion
2	Detect Film Mode Enable		0	0 - 2	0 : 2:3pull down & 2:2pull down 1 : 2:3pull down 2 : 2:2pull down
3	Force IP Mode		2	0 - 2	0 : IP Process Disable 1 : Force Normal IP Mode 2 : Force Film Mode Effective only for PSF Signal.
Group 41	**Deinterlacer setting** Effective only for Progressive ON-L1 mode.				

Electrical Adjustments

Group/ Item	Item Name	Function	Initial	Range	Note
0	Motion Adaptive Weight Value	<KDEINT>	30	0 - 255	
1	Angle Interpolation Level	0 : Conservative <====> 4 : Aggressive	4	0 - 4	
2	CUE Low Pass Filter Enable	<CUELPFEN>	0	0 - 1	
Group 42	**Deinterlacer setting** Effective only for Progressive ON-L2 mode.				
0	Motion Adaptive Weight Value	<KDEINT>	0	0 - 255	
1	Angle Interpolation Level	0 : Conservative <====> 4 : Aggressive	2	0 - 4	
2	CUE Low Pass Filter Enable	<CUELPFEN>	0	0 - 1	
Group 43	**Deinterlacer setting** Effective only for Progressive ON/Film mode.				
0	Motion Adaptive Weight Value	<KDEINT>	30	0 - 255	
1	Angle Interpolation Level	0 : Conservative <====> 4 : Aggressive	4	0 - 4	
2	CUE Low Pass Filter Enable	<CUELPFEN>	0	0 - 1	
Group 45	**Noise Reduction (Time)** Effective only for N.R - Off				
0	Noise Pixel Range	<NSRANGEY> / <NSRANGEUV>	1	0 - 2	
1	Noise Region 0	<NSREGIONY0> / <NSREGIONUV0>	12	0 - 1023	
2	Noise Region 1	<NSREGIONY1> / <NSREGIONUV1>	24	0 - 1023	
3	Noise Region 2	<NSREGIONY2> / <NSREGIONUV2>	40	0 - 1023	
4	Noise Gain Level	<NSFILTERY**> / <NSFILTERUV**>	0	0 - 255	
Group 47	**Noise Reduction (Time)** Effective only for N.R L1				
0	Noise Pixel Range	<NSRANGEY> / <NSRANGEUV>	1	0 - 2	
1	Noise Region 0	<NSREGIONY0> / <NSREGIONUV0>	12	0 - 1023	
2	Noise Region 1	<NSREGIONY1> / <NSREGIONUV1>	24	0 - 1023	
3	Noise Region 2	<NSREGIONY2> / <NSREGIONUV2>	40	0 - 1023	
4	Noise Gain Level	<NSFILTERY**> / <NSFILTERUV**>	50	0 - 255	
Group 49	**Noise Reduction (Time)** Effective only for N.R L2				
0	Noise Pixel Range	<NSRANGEY> / <NSRANGEUV>	1	0 - 2	
1	Noise Region 0	<NSREGIONY0> / <NSREGIONUV0>	12	0 - 1023	
2	Noise Region 1	<NSREGIONY1> / <NSREGIONUV1>	24	0 - 1023	
3	Noise Region 2	<NSREGIONY2> / <NSREGIONUV2>	40	0 - 1023	
4	Noise Gain Level	<NSFILTERY**> / <NSFILTERUV**>	100	0 - 255	
Group 50	**2:2pull down setting**				
0	22Film Mode Sensitivity	Film Detection Sensitivity <FILMSTVT22>	4	1 - 5	
1	22Film Mode Threshold Low	<FILMTHRD22A>	80	0 - 32767	
2	22Film Mode Threshold High	<FILMTHRD22B>	120	0 - 32767	
3	VOFTHR13	<VOFTHR13>	124	0 - 1023	Read only
4	VOFTHR12	<VOFTHR12>	124	0 - 1023	Read only
5	VOFTHR23	<VOFTHR23>	124	0 - 1023	Read only
6	Video Motion Window Start X	<VOFSTARX>	10	0 - 2047	Range of detective for Film mode
7	Video Motion Window Stop X	<VOFSTOPX>	10	0 - 2047	Range of detective for Film mode
8	Video Motion Window Start Y	<VOFSTARY>	10	0 - 1023	Range of detective for Film mode
9	Video Motion Window Stop Y	<VOFSTOPY>	10	0 - 1023	Range of detective for Film mode
Group 51	**2:3pull down setting**				
0	Global Motion Sensitivity	Film Detection Sensitivity <FILMSTVT23>	4	1 - 5	

Electrical Adjustments

Group/ Item	Item Name	Function	Initial	Range	Note
1	Video Motion Sensitivity	Film Detection Sensitivity <VOFSTVT>	4	1 - 5	
2	Video Motion Threshold Low	<VOFTHRDA>	120	0 - 32767	
3	Video Motion Threshold High	<VOFTHRDB>	180	0 - 32767	
4	Global Motion Threshold	<GMDTHRD>	124	0 - 1024	
5	23Film Mode Threshold	<FILMTHRD23>	100	0 - 32767	
6	Global Motion Window Start X	<GMDSTARX>	10	0 - 2047	Range of detective for Film mode
7	Global Motion Window Stop X	<GMDSTOPX>	10	0 - 2047	Range of detective for Film mode
8	Global Motion Window Start Y	<GMDSTARY>	10	0 - 1023	Range of detective for Film mode
9	Global Motion Window Stop Y	<GMDSTOPY>	10	0 - 1023	Range of detective for Film mode
Group 60	**Image**				
0	Center Contrast		512/556/534/534/492/492	0 - 1023	Video(S-Video) / Component / SCART / ANALOG / DIGITAL / HDCP Setting Value= (MENU Value - MENU Center Value) x Alpha / 10 + Center [Setting Value to PW] Contrast [Max] 1023 [Min] 0 Brightness [Max] 1023 [Min] 0 Color [Max] 1023 [Min] 0 Tint [Max] 180 [Min] 0 Sharpness [Max] 57 [Min] 0
1	Center Brightness		512/480/512/500/512/512	0 - 1023	
2	Center Color		512/534/512/512/512/512	0 - 1023	
3	Center Tint		90/90/90/90/90/90	0-180	
4	Center Sharpness		16/16/16/16/16/16	16	
5	Alpha Contrast		40/40/40/40/40/40	0-1000	
6	Alpha Brightness		70/70/70/70/70/70	0-1000	
7	Alpha Color		70/70/70/70/70/70	0-1000	
8	Alpha Tint		10/10/10/10/10/10	0-1000	
9	Alpha Sharpness		10/10/10/10/10/10	0-1000	
Group 100	**Panel Service**				
0	G-SubGain		2048/2068/1940/1960/2252/1900/ 2135/1864	0-4095	PCStandard/PCDynamic/PCReal/ PCBlackBoard/AVStandard/AVDy- namic/AVCinema/AVBlackBoard
1	R-SubGain		2048/2068/1940/1960/1668/1952/ 2008/1197	0-4095	
2	B-SubGain		2048/2068/1940/1960/2100/1431/ 1785/1897	0-4095	
3	G-SubBright		0/0/32/32/47/0/36/2	0-4095	PCStandard/PCDynamic/PCReal/ PCBlackBoard/AVStandard/AVDy- namic/AVCinema/AVBlackBoard
4	R-SubBright		0/0/32/32/12/20/44/2	0-4095	
5	B-SubBright		0/0/32/32/49/0/0/57	0-4095	
6	G-GammaShift		0/0	0-4095	PC/AV Center=512 R] and [B] are linked with [G]
7	R-GammaShift		0/0	0-4095	
8	B-GammaShift		0/0	0-4095	
9	G-ReferH		4095	0-4095	[R] and [B] are linked with [G] Scan Direction (Front/Rear)
10	G-ReferL		421	0-4095	[R] and [B] are linked with [G] Scan Direction (Front/Rear)
11	R-ReferH		4095	0-4095	Scan Direction (Front/Rear)
12	R-ReferL		421	0-4095	Scan Direction (Front/Rear)
13	B-ReferH		4095	0-4095	Scan Direction (Front/Rear)
14	B-ReferL		421	0-4095	Scan Direction (Front/Rear)
15	DXOutR		246	0-1023	
16	DXOutG		246	0-1023	
17	DXOutB		246	0-1023	
18	H_Change_Pos		22	0-255	
19	SH_Base		273	0-4095	
20	NRG_Pos		38	0-127	
21	NRG_Width		48	0-255	
22	OSD_Pos		2	0-3	
23	OSD_Ptn		0	0-9	
24	GammaCtrl		1	0-1	
25	REF_GatePos		3	0-1023	
26	REF_GateDur		182	0-1023	
27	R-BasePos		2	0-15	
28	G-BasePos		2	0-15	
29	B-BasePos		2	0-15	
30	RGB-Adjust		0	0-7	
31	RGB-AdjLv		0	0-4095	Operation STEP=256[0<->256<->51 2<->768<->1023]
32	LineR0		0	0-1023	(MIN<-->MAX Cyclic Operation)

Electrical Adjustments

Group/ Item	Item Name	Function	Initial	Range	Note
32	LineR0		0	0-1023	(MIN<-->MAX Cyclic Operation)
33	LineR1		0	0-1023	(MIN<-->MAX Cyclic Operation)
34	LineR2		0	0-1023	(MIN<-->MAX Cyclic Operation)
35	LineR3		0	0-1023	(MIN<-->MAX Cyclic Operation)
36	LineR4		0	0-1023	(MIN<-->MAX Cyclic Operation)
37	LineG0		0	0-1023	(MIN<-->MAX Cyclic Operation)
38	LineG1		0	0-1023	(MIN<-->MAX Cyclic Operation)
39	LineG2		0	0-1023	(MIN<-->MAX Cyclic Operation)
40	LineG3		0	0-1023	(MIN<-->MAX Cyclic Operation)
41	LineG4		0	0-1023	(MIN<-->MAX Cyclic Operation)
42	LineB0		0	0-1023	(MIN<-->MAX Cyclic Operation)
43	LineB1		0	0-1023	(MIN<-->MAX Cyclic Operation)
44	LineB2		0	0-1023	(MIN<-->MAX Cyclic Operation)
45	LineB3		0	0-1023	(MIN<-->MAX Cyclic Operation)
46	LineB4		0	0-1023	(MIN<-->MAX Cyclic Operation)
47	GhostR-Pos		2	0-31	
48	GhostG-Pos		2	0-31	
49	GhostB-Pos		2	0-31	
50	GhostR-Cent		2	0-2047	
51	GhostR-Start		128	0-255	
52	GhostR-End		128	0-255	
53	GhostG-Cent		2	0-2047	
54	GhostG-Start		128	0-255	
55	GhostG-End		128	0-255	
56	GhostB-Cent		2	0-2047	
57	GhostB-Start		128	0-255	
58	GhostB-End		128	0-255	
59	BlockR1		2047	0-2047	(MIN<-->MAX Cyclic Operation)
60	BlockG1		2047	0-2047	(MIN<-->MAX Cyclic Operation)
61	BlockB1		2047	0-2047	(MIN<-->MAX Cyclic Operation)
62	BlockR2		0	0-2047	(MIN<-->MAX Cyclic Operation)
63	BlockG2		0	0-2047	(MIN<-->MAX Cyclic Operation)
64	BlockB2		0	0-2047	(MIN<-->MAX Cyclic Operation)
65	ReverceR		0	0-2047	(MIN<-->MAX Cyclic Operation)
66	ReverceG		0	0-2047	(MIN<-->MAX Cyclic Operation)
67	ReverceB		0	0-2047	(MIN<-->MAX Cyclic Operation)
68	BackCrossR-Cent		0	0-2047	
69	BackCrossR-Start		128	0-255	
70	BackCrossR-End		128	0-255	
71	BackCrossG-Cent		0	0-2047	
72	BackCrossG-Start		128	0-255	
73	BackCrossG-End		128	0-255	
74	BackCrossBR-Cent		0	0-2047	
75	BackCrossB-Start		128	0-255	
76	BackCrossB-End		128	0-255	
77	ColshdSelect		1	0-1	
78	R-Min		230	0-1023	
79	R-Mid2		437	0-1023	
80	R-Mid1		575	0-1023	
81	R-Max		682	0-1023	
82	G-Min		230	0-1023	
83	G-Mid2		437	0-1023	
84	G-Mid1		575	0-1023	
85	G-Max		682	0-1023	
86	B-Min		230	0-1023	
87	B-Mid2		437	0-1023	
88	B-Mid1		575	0-1023	
89	B-Max		682	0-1023	
90	H-OutPos		110	0-2047	
91	OutAreaLv		0	0-1023	
92	FlickerAdj		0	0/2	not used
93	FRC_Bit		3	0-3	
94	FrontCTalkR-Cent		2044	0-2047	
95	FrontCTalkR-Start		129	0-255	
96	FrontCTalkR-End		132	0-255	
97	FrontCTalkG-Cent		2044	0-2047	
98	FrontCTalkG-Start		129	0-255	
99	FrontCTalkG-End		132	0-255	
100	FrontCTalkB-Cent		2044	0-2047	

Group/ Item	Item Name	Function	Initial	Range	Note
101	FrontCTalkB-Start		129	0-255	
102	FrontCTalkB-End		132	0-255	
103	R-DCOffset-NGain		0/0	0-1023	Scan Direction (Front/Rear)
104	R-DCOffset-N1		0/0	0-2047	Scan Direction (Front/Rear)
105	R-DCOffset-N2		0/0	0-2047	Scan Direction (Front/Rear)
106	R-DCOffset-N3		0/0	0-2047	Scan Direction (Front/Rear)
107	R-DCOffset-N4		0/0	0-2047	Scan Direction (Front/Rear)
108	R-DCOffset-N5		0/0	0-2047	Scan Direction (Front/Rear)
109	R-DCOffset-N6		0/0	0-2047	Scan Direction (Front/Rear)
110	R-DCOffset-N7		0/0	0-2047	Scan Direction (Front/Rear)
111	R-DCOffset-N8		0/0	0-2047	Scan Direction (Front/Rear)
112	R-DCOffset-N9		0/0	0-2047	Scan Direction (Front/Rear)
113	R-DCOffset-N10		0/0	0-2047	Scan Direction (Front/Rear)
114	R-DCOffset-N11		0/0	0-2047	Scan Direction (Front/Rear)
115	R-DCOffset-N12		0/0	0-2047	Scan Direction (Front/Rear)
116	G-DCOffset-NGain		0/0	0-1023	Scan Direction (Front/Rear)
117	G-DCOffset-N1		0/0	0-2047	Scan Direction (Front/Rear)
118	G-DCOffset-N2		0/0	0-2047	Scan Direction (Front/Rear)
119	G-DCOffset-N3		0/0	0-2047	Scan Direction (Front/Rear)
120	G-DCOffset-N4		0/0	0-2047	Scan Direction (Front/Rear)
121	G-DCOffset-N5		0/0	0-2047	Scan Direction (Front/Rear)
122	G-DCOffset-N6		0/0	0-2047	Scan Direction (Front/Rear)
123	G-DCOffset-N7		0/0	0-2047	Scan Direction (Front/Rear)
124	G-DCOffset-N8		0/0	0-2047	Scan Direction (Front/Rear)
125	G-DCOffset-N9		0/0	0-2047	Scan Direction (Front/Rear)
126	G-DCOffset-N10		0/0	0-2047	Scan Direction (Front/Rear)
127	G-DCOffset-N11		0/0	0-2047	Scan Direction (Front/Rear)
128	G-DCOffset-N12		0/0	0-2047	Scan Direction (Front/Rear)
129	B-DCOffset-NGain		0/0	0-1023	Scan Direction (Front/Rear)
130	B-DCOffset-N1		0/0	0-2047	Scan Direction (Front/Rear)
131	B-DCOffset-N2		0/0	0-2047	Scan Direction (Front/Rear)
132	B-DCOffset-N3		0/0	0-2047	Scan Direction (Front/Rear)
133	B-DCOffset-N4		0/0	0-2047	Scan Direction (Front/Rear)
134	B-DCOffset-N5		0/0	0-2047	Scan Direction (Front/Rear)
135	B-DCOffset-N6		0/0	0-2047	Scan Direction (Front/Rear)
136	B-DCOffset-N7		0/0	0-2047	Scan Direction (Front/Rear)
137	B-DCOffset-N8		0/0	0-2047	Scan Direction (Front/Rear)
138	B-DCOffset-N9		0/0	0-2047	Scan Direction (Front/Rear)
139	B-DCOffset-N10		0/0	0-2047	Scan Direction (Front/Rear)
140	B-DCOffset-N11		0/0	0-2047	Scan Direction (Front/Rear)
141	B-DCOffset-N12		0/0	0-2047	Scan Direction (Front/Rear)
142	R-DCOffset-PGain		0/0	0-1023	Scan Direction (Front/Rear)
143	R-DCOffset-P1		0/0	0-2047	Scan Direction (Front/Rear)
144	R-DCOffset-P2		0/0	0-2047	Scan Direction (Front/Rear)
145	R-DCOffset-P3		0/0	0-2047	Scan Direction (Front/Rear)
146	R-DCOffset-P4		0/0	0-2047	Scan Direction (Front/Rear)
147	R-DCOffset-P5		0/0	0-2047	Scan Direction (Front/Rear)
148	R-DCOffset-P6		0/0	0-2047	Scan Direction (Front/Rear)
149	R-DCOffset-P7		0/0	0-2047	Scan Direction (Front/Rear)
150	R-DCOffset-P8		0/0	0-2047	Scan Direction (Front/Rear)
151	R-DCOffset-P9		0/0	0-2047	Scan Direction (Front/Rear)
152	R-DCOffset-P10		0/0	0-2047	Scan Direction (Front/Rear)
153	R-DCOffset-P11		0/0	0-2047	Scan Direction (Front/Rear)
154	R-DCOffset-P12		0/0	0-2047	Scan Direction (Front/Rear)
155	G-DCOffset-PGain		0/0	0-2013	Scan Direction (Front/Rear)
156	G-DCOffset-P1		0/0	0-2047	Scan Direction (Front/Rear)
157	G-DCOffset-P2		0/0	0-2047	Scan Direction (Front/Rear)
158	G-DCOffset-P3		0/0	0-2047	Scan Direction (Front/Rear)
159	G-DCOffset-P4		0/0	0-2047	Scan Direction (Front/Rear)
160	G-DCOffset-P5		0/0	0-2047	Scan Direction (Front/Rear)
161	G-DCOffset-P6		0/0	0-2047	Scan Direction (Front/Rear)
162	G-DCOffset-P7		0/0	0-2047	Scan Direction (Front/Rear)
163	G-DCOffset-P8		0/0	0-2047	Scan Direction (Front/Rear)
164	G-DCOffset-P9		0/0	0-2047	Scan Direction (Front/Rear)
165	G-DCOffset-P10		0/0	0-2047	Scan Direction (Front/Rear)
166	G-DCOffset-P11		0/0	0-2047	Scan Direction (Front/Rear)
167	G-DCOffset-P12		0/0	0-1023	Scan Direction (Front/Rear)
168	B-DCOffset-PGain		0/0	0-1023	Scan Direction (Front/Rear)
169	B-DCOffset-P1		0/0	0-2047	Scan Direction (Front/Rear)

Group/ Item	Item Name	Function	Initial	Range	Note
170	B-DCOffset-P2		0/0	0-2047	Scan Direction (Front/Rear)
171	B-DCOffset-P3		0/0	0-2047	Scan Direction (Front/Rear)
172	B-DCOffset-P4		0/0	0-2047	Scan Direction (Front/Rear)
173	B-DCOffset-P5		0/0	0-2047	Scan Direction (Front/Rear)
174	B-DCOffset-P6		0/0	0-2047	Scan Direction (Front/Rear)
175	B-DCOffset-P7		0/0	0-2047	Scan Direction (Front/Rear)
176	B-DCOffset-P8		0/0	0-2047	Scan Direction (Front/Rear)
177	B-DCOffset-P9		0/0	0-2047	Scan Direction (Front/Rear)
178	B-DCOffset-P10		0/0	0-2047	Scan Direction (Front/Rear)
179	B-DCOffset-P11		0/0	0-2047	Scan Direction (Front/Rear)
180	B-DCOffset-P12		0/0	0-2047	Scan Direction (Front/Rear)
181	ENBX-R		0	0-127	
182	ENBX-G		0	0-127	
183	ENBX-B		0	0-127	
184	DXOutPos		0	0-1	
185	R_V_INPUT_SETP_0		21	0-1023	
186	R_V_INPUT_SETP_512		18	0-1023	
187	R_V_INPUT_SETP_1024		16	0-1023	
188	R_V_INPUT_SETP_1536		10	0-1023	
189	R_V_INPUT_SETP_2048		5	0-1023	
190	R_V_INPUT_SETP_2560		1	0-1023	
191	R_V_INPUT_SETP_3072		1020	0-1023	
192	R_V_INPUT_SETP_3584		1018	0-1023	
193	R_V_INPUT_SETP_4096		0	0-1023	
194	G_V_INPUT_SETP_0		21	0-1023	
195	G_V_INPUT_SETP_512		18	0-1023	
196	G_V_INPUT_SETP_1024		16	0-1023	
197	G_V_INPUT_SETP_1536		10	0-1023	
198	G_V_INPUT_SETP_2048		5	0-1023	
199	G_V_INPUT_SETP_2560		1	0-1023	
200	G_V_INPUT_SETP_3072		1020	0-1023	
201	G_V_INPUT_SETP_3584		1018	0-1023	
202	G_V_INPUT_SETP_4096		0	0-1023	
203	B_V_INPUT_SETP_0		21	0-1023	
204	B_V_INPUT_SETP_512		18	0-1023	
205	B_V_INPUT_SETP_1024		16	0-1023	
206	B_V_INPUT_SETP_1536		10	0-1023	
207	B_V_INPUT_SETP_2048		5	0-1023	
208	B_V_INPUT_SETP_2560		1	0-1023	
209	B_V_INPUT_SETP_3072		1020	0-1023	
210	B_V_INPUT_SETP_3584		1018	0-1023	
211	B_V_INPUT_SETP_4096		0	0-1023	
212	ERPPOL		84	0-4095	
213	FRP_POS		21	0-255	
214	SWAP		5	0-2047	
215	PRE_COLSHD_SEL		0	0-255	
216	HSYNC_FLLOW		1	0-1	
217	DELAY_HSYNC		0	0-2047	
218	DELAY_VSYNC		8	0-255	
219	VSYNC_FOLLOW		0	0-1	
220	BLANK_RCENTER		0	0-2047	
221	BLANK_RSTART		128	0-255	
222	BLANK_REND		128	0-255	
223	BLANK_GCENTER		0	0-2047	
224	BLANK_GSTART		128	0-255	
225	BLANK_GEND		128	0-255	
226	BLANK_BCENTER		0	0-2047	
227	BLANK_BSTART		128	0-255	
228	BLANK_BEND		128	0-255	
229	Output limit R		3359/4092/3359/3359	0-4095	
230	Output limit G		3359/4092/3359/3359	0-4095	
231	Output limit B		3359/4092/3359/3359	0-4095	
232	CROSSTALK_COEF_R		1023	0-1023	
233	CROSSTALK COEF_G		1023	0-1023	
234	CROSSTALK COEF_B		1023	0-1023	
235	LCCON_ENABLE		0	0-1	
236	ENBY_L1		36	0-255	
237	ENBY_H1		822	0-1023	
238	ENBY_L2		46	0-255	

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Group/ Item	Item Name	Function	Initial	Range	Note
239	ENBY_H2		822	0-1023	
Group 101	**Panel Service(6150/1060)**				
0	R_LCCOM		179	0-255	
1	G_LCCOM		181	0-255	
2	B-LCCOM		176	0-255	
3	R-ENBX-PW		5	0-15	
4	G-ENBX-PW		5	0-15	
5	B-ENBX-PW		5	0-15	
6	R-DXIN		15	0-127	
7	G-DXIN		15	0-127	
8	B-DXIN		15	0-255	
9	R-ENBX1IN		17	0-31	
10	G-ENBX1IN		17	0-31	
11	B-ENBX1IN		17	0-31	
12	Vmid		112	0-255	
13	R-Ref		141	0-255	
14	G-Ref		133	0-255	
15	B-Ref		138	0-255	
Group 102	**Auto Keystone Setup Value**				
0	OFFSET		0	-1056 - 1056	
1	OFFSET SWITCH		0	0 - 1	
2	DEBUG MODE		0	0 - 1	
3	SERVICE CALIBRATION		0	0 - 1	
4	LOCK COUNT		5	1 - 255	
5	DELT VERT RESULT		64	1 - 255	
6	ANGLE 1 COUNT		1	1 - 10	
7	ANGLE 2 COUNT		5	1 - 10	
8	BLIND SECTOR 1		160	0 - 1024	
9	BLIND SECTOR 3		32	0 - 1024	
10	BLIND SECTOR BIAS		61	0 - 1024	
Group 200	**Option**				
0	Logo Prohibition (Forced No Brand)	Logo Prohibition (0: Menu, 1: Forced, 2: China, 3-9: not used)	0	0 - 2	Effective after AC On
1	RS232C Baudrate	Baud Rate	0	0 - 2	0: 19200bps, 1: 9600bps, 2: 115200bps
2	PJLink Enable	PJLink	0	0 - 1	0: Disable 1: Enable
4	CABLE SW	Long Cable	0	0 - 10	0: Disable, 1: Enable
5	PW Debug Command Enable		0	0 - 1	0:Disable (Serial Command Eanble) 1: Enable (PW Debug Mode)
6	Device Refresh Disable		0	0 - 1	0:Enable, 1:Disable No last memory
7	Device Access Disable		0	0 - 1	0:Enable (Normal), 1:Disable No last memory
50	Lamp Replacement Display	Lamp Warning Display On / Off	1	0 - 1	1: On, 0: Off
51	Filter Warning Display	Filter Warning Display On / Off	1	0 - 1	1: On, 0: Off
52	Lamp Counter reset Times	Reset Times of Lamp Counter	0	0 - 255	Read only
54	Factory Default Execute Times	Reset times of Fanctory Default	0	0 - 255	Read only
55	Motor Disable	Motors Disable	0	0 - 1	0: On, 1: Off
56	Menu Position	Move menu (X asis)	0	0 - 1024	
57	Menu Position	Move menu (Y asis)	0	0 - 1024	
58	Lamp Go Out		0	0 - 1	
59	Source Search Enable	Source Search Enable (0: Disable 1:Enable)	0	0 - 1	
60	Language Default Setting	Language Default setting (0: English 1:Japanese)	0	0 - 1	

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Group/ Item	Item Name	Function	Initial	Range	Note
61	OSD Aspect HL	OSD display position offset H left	105	0-1024	
62	OSD Aspect HR	OSD display position offset H right	105	0-1024	
63	Screen Aspect VT	OSD display offset V top	45	0-1024	
64	Screen Aspect VB	OSD display offsetr V bottom	45	0-1024	
70	RC Mode	RC mode setting	0	0	
Group 201	**Option (signal)**				
0	FrameLock Option		1	0 - 1	0: FrameLockOFF at PC signal 1: FrameLockON at PC signal and 47Hz (Vfreq) ~ Panel frequency of input signal
2	Field Sense Invert Enable		0	0 - 1	Reverse Processing of FLDINVSetting Value 0: Disable - Used FLDINV Setting Value 1: Enable - Used Reversed FLDINV Setting Value
3					
4	Sub Image Enable		1	0 - 1	0:Disable (Service Adjustment Dsiable, Used all the Center Values 1:Enable (Service Adjustment Enable)
6	Zoom Accelerator Enable		0	0 - 1	0:Zoom Accelerator OFF, 1:Zoom Accelerator ON No last memory
7	DZoom Reset by Keystone		0	0 - 1	0:Enable (Normal), 1:Disable (Dzoo is not cancelled even if Keystone is cancelled) No last memory
8	Stability Count	Count Value of V-missing	5	0 - 255	
9	Sensivity for Signal Lost (HSYNC)	Only used this value for No Signal Judgement(Hz)	350	0 - 65535	
10	Sensivity for Signal Lost (VSYNC)	Only used this value for No Signal Judgement(Line)	3	0 - 255	
11	Keystone Filter Center Value	Reference Value	16	0 - 30	
Group 210	**LampContorl**				
0	DIMMER_CTRL_LEVEL1	Luminance Level 1 Data for Dimmer: Dim Level 1 at the less than the Value	9	0 - 255	
1	DIMMER_CTRL_LEVEL2	Luminance Level 2 Data for Dimmer: Dim Level 2 at the less than the Value	18	0 - 255	
2	DIMMER_CTRL_LEVEL3	Luminance Level 3 Data for Dimmer: Dim Level 3 at the less than the Value	26	0 - 255	
3	DIMMER_CTRL_LEVEL4	Luminance Level 4 Data for Dimmer: Dim Level 4 at the less than the Value	35	0 - 255	
4	DIMMER_CTRL_LEVEL5	Luminance Level 5 Data for Dimmer: Dim Level 5 at the less than the Value	44	0 - 255	
5	DIMMER_CTRL_LEVEL6	Luminance Level 6 Data for Dimmer: Dim Level 6 at the less than the Value	53	0 - 255	
6	DIMMER_CTRL_LEVEL7	Luminance Level 7 Data for Dimmer: Dim Level 7 at the less than the Value	61	0-255	
7	DIMMER_CTRL_LEVEL8	Luminance Level 8 Data for Dimmer: Dim Level 8 at the less than the Value	70	0-255	
8	DIMMER_CTRL_LEVEL9	Luminance Level 9 Data for Dimmer: Dim Level 9 at the less than the Value	79	0-255	
9	DIMMER_CTRL_LEVEL10	Luminance Level 10 Data for Dimmer: Dim Level 10 at the less than the Value	88	0-255	
10	DIMMER_CTRL_LEVEL11	Luminance Level 11 Data for Dimmer: Dim Level 11 at the less than the Value	96	0 - 255	
11	DIMMER_CTRL_LEVEL12	Luminance Level 12 Data for Dimmer: Dim Level 12 at the less than the Value	105	0 - 255	
12	DIMMER_CTRL_LEVEL13	Luminance Level 13 Data for Dimmer: Dim Level 13 at the less than the Value	255	0 - 255	
13	DIMMER_CTRL_LEVEL14	Luminance Level 14 Data for Dimmer: Dim Level 14 at the less than the Value	255	0 - 255	
14	DIMMER_CTRL_LEVEL15	Luminance Level 15 Data for Dimmer: Dim Level 15 at the less than the Value	255	0 - 255	

Electrical Adjustments

Group/ Item	Item Name	Function	Initial	Range	Note
15	DIMMER_AVERAGE_POINT	Luminance Data Avarage Point for Mimmer	4	0 - 16	
16	DIMMER_AVERAGE_DATA	Luminance Data Avarage Value for Dimmer	-	-	* Read only
17	DIMMER_LEVEL_AUTO	Current Dimmer Leverl	-	-	* Read only
18	DIMMER_LEVEL_NORMAL	Normal Dimmer Level	12	0 - 15	
19	DIMMER_LEVEL_ECO	Eco Dimmer Level	0	0 - 15	
20	Lamp check enable		0		0: Lamp Failure Detection OFF (White 50% Back), 1 : ON (Blue 100% Back)
21	VOLTAGE_LEVEL	Lamp Voltage	-		Unit: 8bit(Raw Data) * Read only
22	DIMMER_LEVEL_HIGH	Dimmer level High	15	0 - 15	
Group 231	**VBI Slice Level**				
0	Generic Initial Slicing Level	PW190 register 0xE344	0x34	0-255	
1	Generic High Level Thresh-old	PW190 register 0xE345	--	0-255	
2	Generic Low Level Threshold	PW190 register 0xE346	--	0-255	
3	Generic Minimum Low Level	PW190 register 0xE347	0x30	0-255	
4	Generic Maximum High Level	PW190 register 0xE348	0xe0	0-255	
Group 250	**FAN Control**				
0	FAN1 MIN ADJUST (DAC)	DAC Output for Fan	10	0 - 255	
1	FAN1 MAX ADJUST (DAC)	Adjust the tolerance of DAC and Fan	224	0 - 255	
2	FAN2 MIN ADJUST (DAC)	Volage.	44	0 - 255	
3	FAN2 MAX ADJUST (DAC)	* Lamp mode is forced Eco	225	0 - 255	
6	Not used				
7	Not used				
Group 251					
	Not used				
Group 252	**Fan Option**				
0	HI-LAND SWITCH	0: Normal, 1: Hi-Land, 2-4: Hi-Land 1-3	0	0 - 5	
1	SAFETY SWITCH	For test purpose	0	0 - 6	
2	FAN MANUAL SWITCH	0: Auto, 1: Manual	0	0 - 3	
3	FAN1 MANUAL VOLTAGE	Fan Voltage (unit : 0.1V)	100	0 - 255	
4	FAN2 MANUAL VOLTAGE	Effective only when Fan Manual	100	0 - 255	
5	FAN3 MANUAL VOLTAGE	switch is 1	-	0 - 255	
6	Not used				

Group 253	Fan Tem Error Setting (Memorized)		Normal	Ceiling	HiLand-Normal	HiLand-Ceiling		
5	Temp A Warning (Normal)	Temp. A to judge the Temp Error at Normal (Room)	55	55	47	46	30-100	
6	Temp B Warning (Normal)	Temp. B to judge the Temp Error at Normal (Panel)	60	59	54	53	30-100	
7	Temp C Warning (Normal)	Temp. C to judge the Temp Error at Normal (Lamp)	70	70	65	64	30-100	
8	Temp B-A Warning (Normal)	Temp. B-A to judge the Temp Error at Normal (Clogging Det.)	100	100	100	100	0 - 100	
9	Temp C-A Warning(Normal)	Temp. C-A to judge the Temp Error at Normal (Clogging Det.)	100	100	100	100	0-100	
10	Temp A Warning (Eco)	Temp. A to judge the Temp Error at Eco (Room)	55	55	47	46	30-100	
11	Temp B Warning (Eco)	Temp. B to judge the Temp Error at Eco(Panel)	60	60	55	54	30-100	
12	Temp C Warning (Eco)	Temp. C to judge the Temp Error at Eco(Panel)	71	70	66	65	30-100	
13	Temp B-A Warning (Eco)	Temp. B-A to judge the Temp Error at Normal (Clogging Det.)	100	100	100	100	0-100	
14	Temp C-A Warning (Eco)	Temp. C-A to judge the Temp Error at Normal (Clogging Det.)	100	100	100	100	0-100	
15	Temp A Warning Offset (Temp)			8			0-100	
16	Temp B Warning Offset (Temp)	Offset of Temp Error (Temp.)		8			0-100	
17	Temp C Warning Offset (Temp)	Error Setting Value is increased XC at the below condition		8			0-100	
18	Temp B-A Warning Offset (Temp)	* Standby * Right to turn on the lamp *Right to change the Lamp mode		8			0-100	
19	Temp C-A Warning Offset (Temp)			8			0-100	

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Group/ Item	Item Name	Function	Initial	Range	Note
20	Temp A Warning Offset (Time)	Offset of Temp Error (Minutes) Error Setting Value is increased X minute at the below condition * Standby * Right to turn on the lamp *Right to change the Lamp mode	3	0-100	
21	Temp B Warning Offset (Time)		3	0-100	
22	Temp C Warning Offset (Time)		3	0-100	
23	Temp B-A Warning Offset (Time)		3	0-100	
24	Temp C-A Warning Offset (Time)		3	0-100	

Group 254	Fan Control Range Setting (Temp./Voltage)		Normal	Ceiling	HiLand-Normal	HiLand-Ceiling		
10	Normal Fan Control Min Temp	Temp Senser Control Start/End Tem. p at Normal	46	45	39	38	20-100	
11	Normal Fan Control Max Temp		50	49	44	43	20-100	
12	Normal Fan1 Min	Fan voltage value at Normal (unit: 0.1V)	72	72	115	115	0-255	
13	Normal Fan1 Max		135	135	135	135	0-255	
14	Normal Fan2 Min		80	80	110	110	0-255	
15	Normal Fan2 Max		130	130	130	130	0-255	
20	Eco Fan Control Min Temp	Temp Senser Control Start/End Tem. p at Eco	46	45	39	38	20-100	
21	Eco Fan Control Max Temp		50	49	44	43	20-100	
22	Eco Fan1 Min	Fan voltage value at Eco (unit: 0.1V)	52	52	100	100	0-255	
23	Eco Fan1 Max		115	115	120	120	0-255	
24	Eco Fan2 Min		65	65	75	75	0-255	
25	Eco Fan2 Max		85	85	91	91	0-255	

Group 255	Fan Start/Cooling Setting				
0	Fan1 Initial Volt	Fan Start Voltage (0.1V)	70	0-255	
1	Fan2 Initial Volt		70	0-255	
4	Fan1 Cooling Speed	Fan Voltage at Power Off (0.1V)	100	0-255	
5	Fan2 Cooling Speed		100	0-255	
8	Cooling Time L1	Cooling Time stting at Fan Mode L1 (x 30 sec) 1: 30, 3: 90, 15: 450 sec.	3	1-15	
9	Cooling Time L2	Cooling Time stting at Fan Mode L2 (x 30 sec) 1: 30, 3: 90, 15: 450 sec.	4	1-15	
10	Temp Error Cooling Time	Cooling Time setting at Temp Erro (x 30 sec)	4	1-15	
11	OnStart Cooling Start Threshold		38	0-100	
12	After shutdown cooling	Cooling after shutdown (0: No, 1: Yes)	1	0-1	

Group 256	Fan Lamp Voltage Down Setting				
0	Lamp Voltage	Current Lamp Voltage (0.1V)(Read only)	-	0-255	
1	Lamp Vol Threshold	Threshold to judge Lamp Voltage Down (V×10)	0	30-90	
2	Fan1 Speed Gain	Additional Fan Speed of Min at Lamp Voltage Down (unit: 0.1V)	10	0-255	
3	Fan2 Speed Gain		10	0-255	

Group 257	Fan Dimmer Setting				
0	Dimmer Average Chech Period	Dimmer Average measurement Time (0:10sec. 1:30sec. 2:60 sec. 90: sec...10:30sec.)	1	0-10	
1	Dimmer Average	Dimmer Average Value (Read only)	-		
2	Last Voltage Difference		-		
3	Voltage Difference Goal		-		

Group 258	FAN network mode IC Temp.				
0	Standby Cooling Check Cycle	Standby Cooling Check Cycle	5	-	
1	Standy Cooling Start Threshold	Standy Cooling Start Threshold	55	-	
2	Standby Cooling Enable	Standby Cooling Enable	1	-	

Group 260	Auto Calibration (Common)* Auto Calibration				
0	Execute Calibration		0	0-1	Executes Auto-Calibration when changiing the Value (PC White 100%)

Electrical Adjustments

Group/ Item	Item Name	Function	Initial	Range	Note
1	Loop Count	Maximum Execution Times (OFFSET->GAIN)	10	1 - 30	
2	Auto Status	Result of Auto-Calibration (Last Memory)	0	0 / 1 / 9	0: OK, 1: Adjusting,9: Error * ReadOnly
3	AutoWait	Wait Value for each setting	1	1 - 20	
4	CHECK -Tolelance	Torelance of OFFSET	2	1 - 255	
Group 261	**Auto Calibration (RGB)**				
0	OFFSET AREA H START	Black Level Acquiring Area H-Start Position	975	0 - 1000	
1	OFFSET AREA V START	Black Level Acquiring Area V-Start Position	500	0 - 1000	
2	GAIN AREA H START	White Level Acquiring Area H-Start Position	25	0 - 1000	
3	GAIN AREA V START	White Level Acquiring Area V-Start Position	500	0 - 1000	
4	Image AREA H WIDTH	Black/White Level Acquiring Area	13	0 - 4095	
5	Image AREA V HIGHT	Black/White Level Acquiring Area Height	9	0 - 4095	
6	OFFSET target	Target Value of Black Level Adj.	3	0 - 127	
7	OFFSET torelance	Torelance of Black Level Adj.	1	1 - 127	
8	GAIN target	Target Value of White Level Adj.	238	0 - 255	
9	GAIN torelance	Torelance of White Level Adj.	1	1 - 255	
Group 262	**Auto Calibration (CVBS/SVIDEO)**				
0	Y Image Area Start X	Y Acquiring Area H-Start Position	20	0 - 1000	
1	Y Image Area Start Y	Y Acquiring Area V-Start Position	500	0 - 1000	
6	Image Area H Width	Image Level Acquiring Area	13	0 - 4095	
7	Image Area V Hight	Image Level Acquiring Area Height	20	0 - 4095	
8	Y Target Level	Target Value of Y Level Adj.	217	0 - 255	
11	Gain Tolerance	Torelance of Level Adj.	1	0 - 255	
12	Delta Gain	Deviation Width of Gain Value	9	0 - 255	
Group 264	**Auto Calibration (YCbCr)**				
0	Y-OFFSET AREA H START	Y - Offset Acquiring Area H-Start Position	925	0 - 1000	
1	Y-OFFSET AREA V START	Y - Offset Acquiring Area V-Start Position	500	0 - 1000	
2	CB - OFFSET AREA H START	CB - Offset Acquiring Area H-Start Position	925	0 - 1000	If not used: use Y's value
3	CB - OFFSET AREA V START	CB - Offset Acquiring Area V-Start Position	500	0 - 1000	If not used: use Y's value
4	CR - OFFSET AREA H START	CR - Offset Acquiring Area H-Start Position	925	0 - 1000	If not used: use Y's value
5	CR - OFFSET AREA V START	CR - Offset Acquiring Area V-Start Position	500	0 - 1000	If not used: use Y's value
6	Y - GAIN AREA H START		50	0 - 1000	
7	Y - GAIN AREA V START		500	0 - 1000	
8	CB - GAIN AREA H START		800	0 - 1000	
9	CB - GAIN AREA V START		500	0 - 1000	
10	CR - GAIN AREA H START		700	0 - 1000	
11	CR - GAIN AREA V START		500	0 - 1000	
12	Image AREA H WIDTH	YCBCR Level Acquiring Area	8	0 - 4095	
13	Image AREA V HIGHT	YCBCR Level Acquiring Area Height	9	0 - 4095	
14	Y - OFFSET TARTGET		4	0 - 255	
15	CB OFFSET TARGET		128	0 - 255	
16	CR OFFSET TARGET		128	0-255	
17	Y-GAIN TARGET		217	0-255	
18	CB-GAINTARGET		237	0-255	
19	CR-GAINTARGET		237	0-255	
20	OFFSET torelance		1	1-255	
21	GAIN torelance		1	1-255	
Group 280	**AutoPC Adjust**				
0	AutoPCAdjustEnable	Auto-PC Adj Operation Enable if Un-supported Signal Input	0	0-1	0:Enabel, 1:Disable
1	Frequency Step	Frequency Steps of Total Dot	1	0-3	
2	Frequency Threshold	Total Dot Freqency Threshold	5	0-10	0[]<-- - --> 10[Not matched]
3	Fine Phase	Do Phase Adj after Total Dot Adj.	1	0-1	0;Excutes Fine Phase; 1:Not Excute
4	BLKDET	Black Level Detection Area	1	0 - 3	

Electrical Adjustments

Group/ Item	Item Name	Function	Initial	Range	Note
5	PHASEMSK	Phase Detection Filter	0	0 - 3	0: Effective All Bit, 1: Disable Lower 1 bit 2: Disable Lower 2 bit, 3: Disable Lower 3 bit
Group 290	**PanelType * Panel Type Check**				
0	GammaL/R-View	Current Setting Check	0	0-20	0: Gamma for L-Turn 20: Gamma for R-Turn * Read only
1	GammaL/R-Change	Setting of Gamma	10	0-20	Sets L-Turn Gamma if the Value is set to 0. Sets R-Turn Gamma if the Value is set to 20.
Group 500	**Composite (NTSC) Composite / S-Video**				
0					
1	Disp Dots		668	0 ~ 4095	
2	H Back Porch		28	0 ~ 4095	
3	V Back Porch		18	0 ~ 4095	
4	Disp Line		458	0 ~ 4095	
Group 501	**Composite (PAL) Composite / S-Video**				
0					
1	Disp Dots		658	0 ~ 4095	
2	H Back Porch		34	0 ~ 4095	
3	V Back Porch		22	0 ~ 4095	
4	Disp Line		536	0 ~ 4095	
Group 502	**Composite (SECAM) Composite / S-Video**				
0					
1	Disp Dots		652	0 ~ 4095	
2	H Back Porch		28	0 ~ 4095	
3	V Back Porch		22	0 ~ 4095	
4	Disp Line		536	0 ~ 4095	
Group 510	**SCART(480i)**				
0					
1	Disp Dots		674	0 ~ 4095	
2	H Back Porch		132	0 ~ 4095	
3	V Back Porch		43	0 ~ 4095	
4	Disp Line		452	0 ~ 4095	
Group 511	**SCART (575i)**				
0					
1	Disp Dots		650	0 ~ 4095	
2	H Back Porch		152	0 ~ 4095	
3	V Back Porch		68	0 ~ 4095	
4	Disp Line		514	0 ~ 4095	
Group 520	**YCbCr (480i)**				
0	Total Dots		858	0 ~ 4095	
1	Disp Dots		670	0 ~ 4095	
2	H Back Porch		146	0 ~ 4095	
3	V Back Porch		48	0 ~ 4095	
4	Disp Line		458	0 ~ 4095	
Group 520	**YCbCr (480i)**				
0	Total Dots		858	0 ~ 4095	
1	Disp Dots		670	0 ~ 4095	
2	H Back Porch		146	0 ~ 4095	
3	V Back Porch		48	0 ~ 4095	
4	Disp Line		458	0 ~ 4095	
Group 521	**YCbCr (575i)**				
0	Total Dots		864	0~4095	

Electrical Adjustments

Group/ Item	Item Name	Function	Initial	Range	Note
1	Disp Dots		656	0~4095	
2	H Back Porch		162	0~4095	
3	V Back Porch		64	0~4095	
4	Disp Line		534	0~4095	
Group 522	**YCbCr (480P)**				
0	Total Dots		858	0 ~ 4095	* Read only
1	Disp Dots		684	0 ~ 4095	
2	H Back Porch		136	0 ~ 4095	
3	V Back Porch		46	0 ~ 4095	
4	Disp Line		460	0 ~ 4095	
Group 523	**YCbCr (575P)**				
0	Total Dots		864	0 ~ 4095	* Read only
1	Disp Dots		690	0 ~ 4095	
2	H Back Porch		142	0 ~ 4095	
3	V Back Porch		56	0 ~ 4095	
4	Disp Line		550	0 ~ 4095	
Group 524	**YCbCr (720P - 60)**				
0	Total Dots		1650	0 ~ 4095	* Read only
1	Disp Dots		1248	0 ~ 4095	
2	H Back Porch		313	0 ~ 4095	
3	V Back Porch		34	0 ~ 4095	
4	Disp Line		700	0 ~ 4095	
Group 525	**YCbCr (720P - 50)**				
0	Total Dots		1980	0 ~ 4095	* Read only
1	Disp Dots		1248	0 ~ 4095	
2	H Back Porch		338	0 ~ 4095	
3	V Back Porch		36	0 ~ 4095	
4	Disp Line		700	0 ~ 4095	
Group 526	**YCbCr (1080i - 60)**				
0	Total Dots		2200	0 ~ 4095	* Read only
1	Disp Dots		1872	0 ~ 4095	
2	H Back Porch		256	0 ~ 4095	
3	V Back Porch		54	0 ~ 4095	
4	Disp Line		1052	0 ~ 4095	
Group 527	**YCbCr (1080i - 50)**				
0	Total Dots		2640	0 ~ 4095	* Read only
1	Disp Dots		1870	0 ~ 4095	
2	H Back Porch		257	0 ~ 4095	
3	V Back Porch		54	0 ~ 4095	
4	Disp Line		1052	0 ~ 4095	
Group 528	**YCbCr (1035i)**				
0	Total Dots		2200	0 ~ 4095	* Read only
1	Disp Dots		1872	0 ~ 4095	
2	H Back Porch		256	0 ~ 4095	
3	V Back Porch		92	0 ~ 4095	
4	Disp Line		1012	0 ~ 4095	
Group 540	**RGB Video (480i)**				
0	Total Dots		960	0 ~ 4095	
1	Disp Dots		752	0 ~ 4095	
2	H Back Porch		166	0 ~ 4095	
3	V Back Porch		48	0 ~ 4095	
4	Disp Line		460	0 ~ 4095	
5	Clamp		1	0 ~ 255	
6	Clamp Width		31	0 ~ 255	

Electrical Adjustments

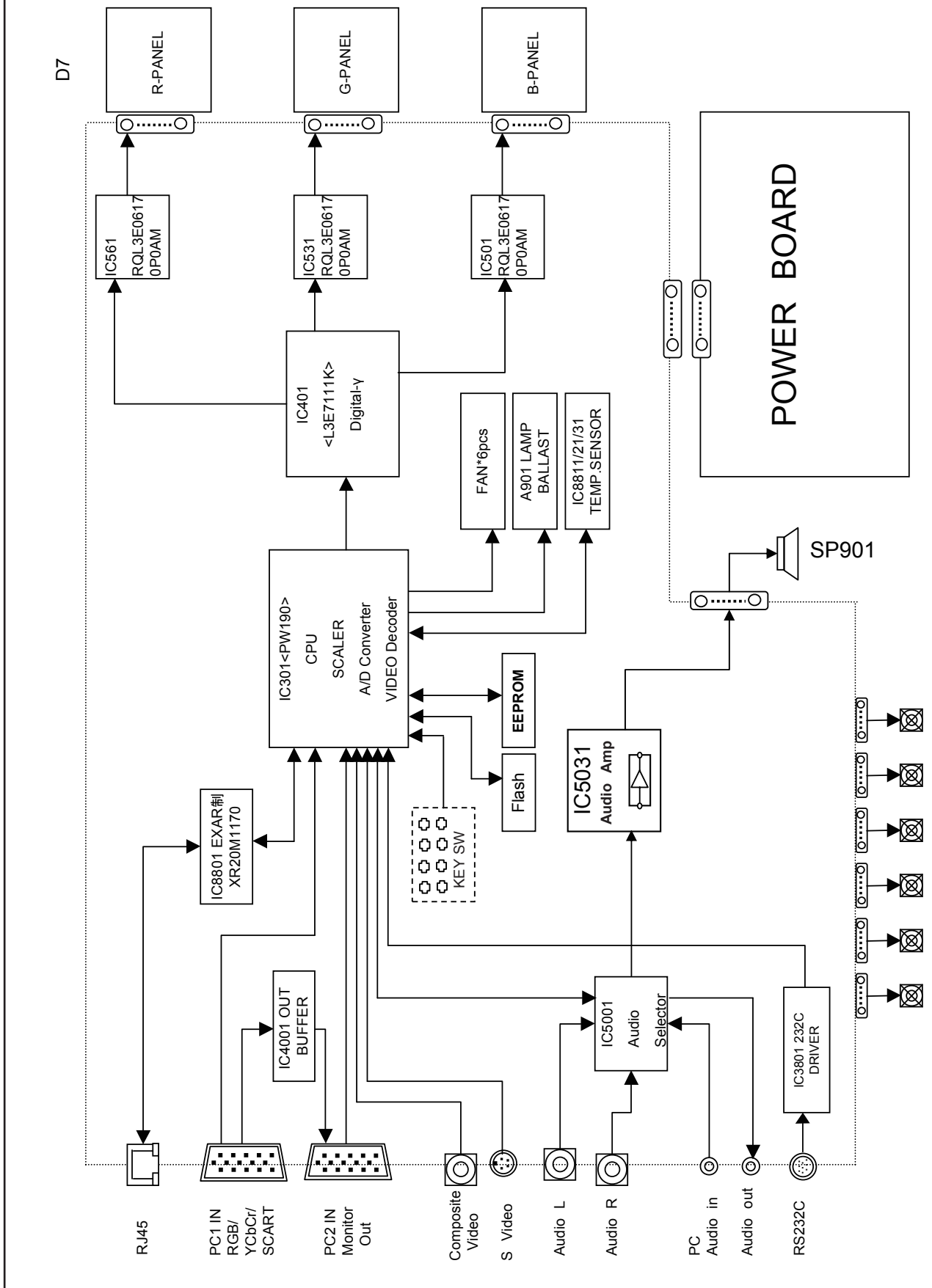
Group/ Item	Item Name	Function	Initial	Range	Note
Group 541	**RGB Video (575i)**				
1	Disp Dots		736	0 ~ 4095	
2	H Back Porch		182	0 ~ 4095	
3	V Back Porch		66	0 ~ 4095	
4	Disp Line		536	0 ~ 4095	
5	Clamp		1	0 ~ 255	
6	Clamp Width		31	0 ~ 255	
Group 542	**RGB Video (480P)**				
0	Total Dots		960	0 ~ 4095	
1	Disp Dots		766	0 ~ 4095	
2	H Back Porch		156	0 ~ 4095	
3	V Back Porch		46	0 ~ 4095	
4	Disp Line		460	0 ~ 4095	
5	Clamp		1	0 ~ 255	
6	Clamp Width		31	0 ~ 255	
Group 543	**RGB Video (575P)**				
0	Total Dots		986	0 ~ 4095	
1	Disp Dots		774	0 ~ 4095	
2	H Back Porch		174	0 ~ 4095	
3	V Back Porch		62	0 ~ 4095	
4	Disp Line		540	0 ~ 4095	
5	Clamp		1	0 ~ 255	
6	Clamp Width		31	0 ~ 255	
Group 544	**RGB Video (720P - 60)**				
0	Total Dots		1650	0 ~ 4095	
1	Disp Dots		1248	0 ~ 4095	
2	H Back Porch		310	0 ~ 4095	
3	V Back Porch		34	0 ~ 4095	
4	Disp Line		702	0 ~ 4095	
5	Clamp		1	0 ~ 255	
6	Clamp Width		31	0 ~ 255	
Group 545	**RGB Video (720P - 50)**				
0	Total Dots		1980	0 ~ 4095	
1	Disp Dots		1246	0 ~ 4095	
2	H Back Porch		310	0 ~ 4095	
3	V Back Porch		34	0 ~ 4095	
4	Disp Line		702	0 ~ 4095	
5	Clamp		1	0 ~ 255	
6	Clamp Width		31	0 ~ 255	
Group 546	**RGB Video (1080i - 60)**				
0	Total Dots		2200	0 ~ 4095	
1	Disp Dots		1872	0 ~ 4095	
2	H Back Porch		254	0 ~ 4095	
3	V Back Porch		56	0 ~ 4095	
4	Disp Line		1052	0 ~ 4095	
5	Clamp		1	0 ~ 255	
6	Clamp Width		31	0 ~ 255	
Group 547	**RGB Video (1080i - 50)**				
0	Total Dots		2640	0 ~ 4095	
1	Disp Dots		1868	0 ~ 4095	
2	H Back Porch		258	0 ~ 4095	
3	V Back Porch		54	0 ~ 4095	
4	Disp Line		1052	0 ~ 4095	
5	Clamp		1	0 ~ 255	
6	Clamp Width		31	0 ~ 255	
Group 548	**RGB Video (1035i)**				
0	Total Dots		2200	0 ~ 4095	

Electrical Adjustments

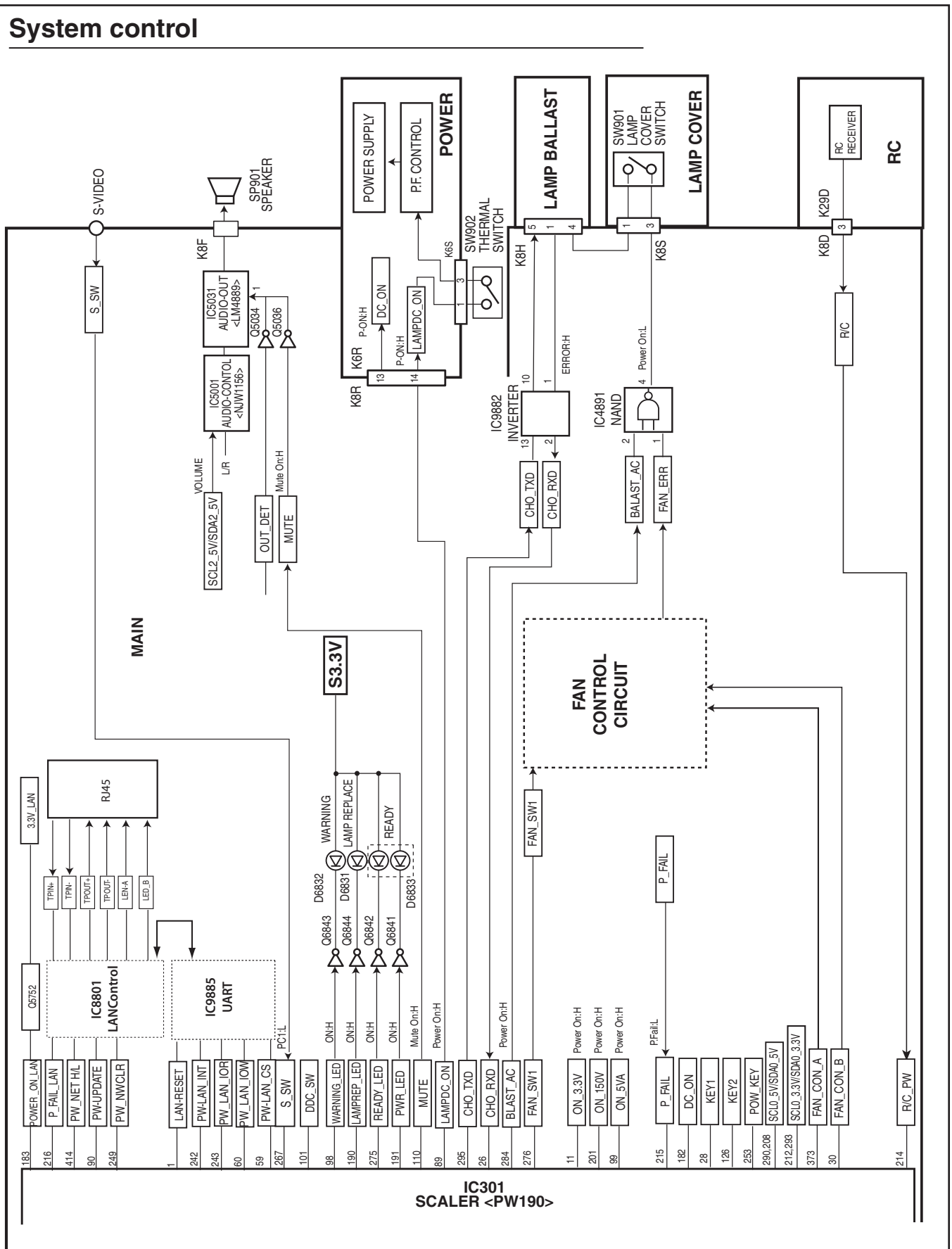
Group/ Item	Item Name	Function	Initial	Range	Note
2	H Back Porch		258	0 ~ 4095	
3	V Back Porch		92	0 ~ 4095	
4	Disp Line		1012	0 ~ 4095	
Group 560	**HDCP (480P)**				
7	Over Scan	Over Scan Rate (0 ~ 25.5% at 0.1% steps)	0	0 - 255	
8	VSBEG		2	0 - 15	
Group 561	**HDCP (575P)**				
7	Over Scan	Over Scan Rate (0 ~ 25.5% at 0.1% steps)	0	0 - 255	
8	VSBEG		2	0 - 15	
Group 562	**HDCP (720P-60)**				
7	Over Scan	Over Scan Rate (0 ~ 25.5% at 0.1% steps)		0 - 255	
8	VSBEG		2	0 - 15	
Group 563	**HDCP (720P-50)**				
7	Over Scan	Over Scan Rate (0 ~ 25.5% at 0.1% steps)	0	0 - 255	
8	VSBEG		2	0 - 15	
Group 564	**HDCP (1080i-60)**				
7	Over Scan	Over Scan Rate (0 ~ 25.5% at 0.1% steps)	0	0 - 255	
8	VSBEG		2	0 - 15	
Group 565	**HDCP (1080i-50)**				
7	Over Scan	Over Scan Rate (0 ~ 25.5% at 0.1% steps)	0	0 - 255	
8	VSBEG		2	0 - 15	
Group 566	**HDCP (1035i)**				
7	Over Scan	Over Scan Rate (0 ~ 25.5% at 0.1% steps)	0	0 - 255	
8	VSBEG		2	0 - 15	
Group 981	**Color Shading Adj Offset**				
0	R-Max		0/0	0-255	
1	R-Mid1		0/0	0-255	
2	R-Mid2		0/0	0-255	
3	R-Min		0/0	0-255	
4	G-Max		0/0	0-255	
5	G-Mid1		0/0	0-255	
6	G-Mid2		0/0	0-255	
7	G-Min		0/0	0-255	
8	B-Max		0/0	0-255	
9	B-Mid1		0/0	0-255	
10	B-Mid2		0/0	0-255	
11	B-Min		0/0	0-255	

Chassis Block Diagrams

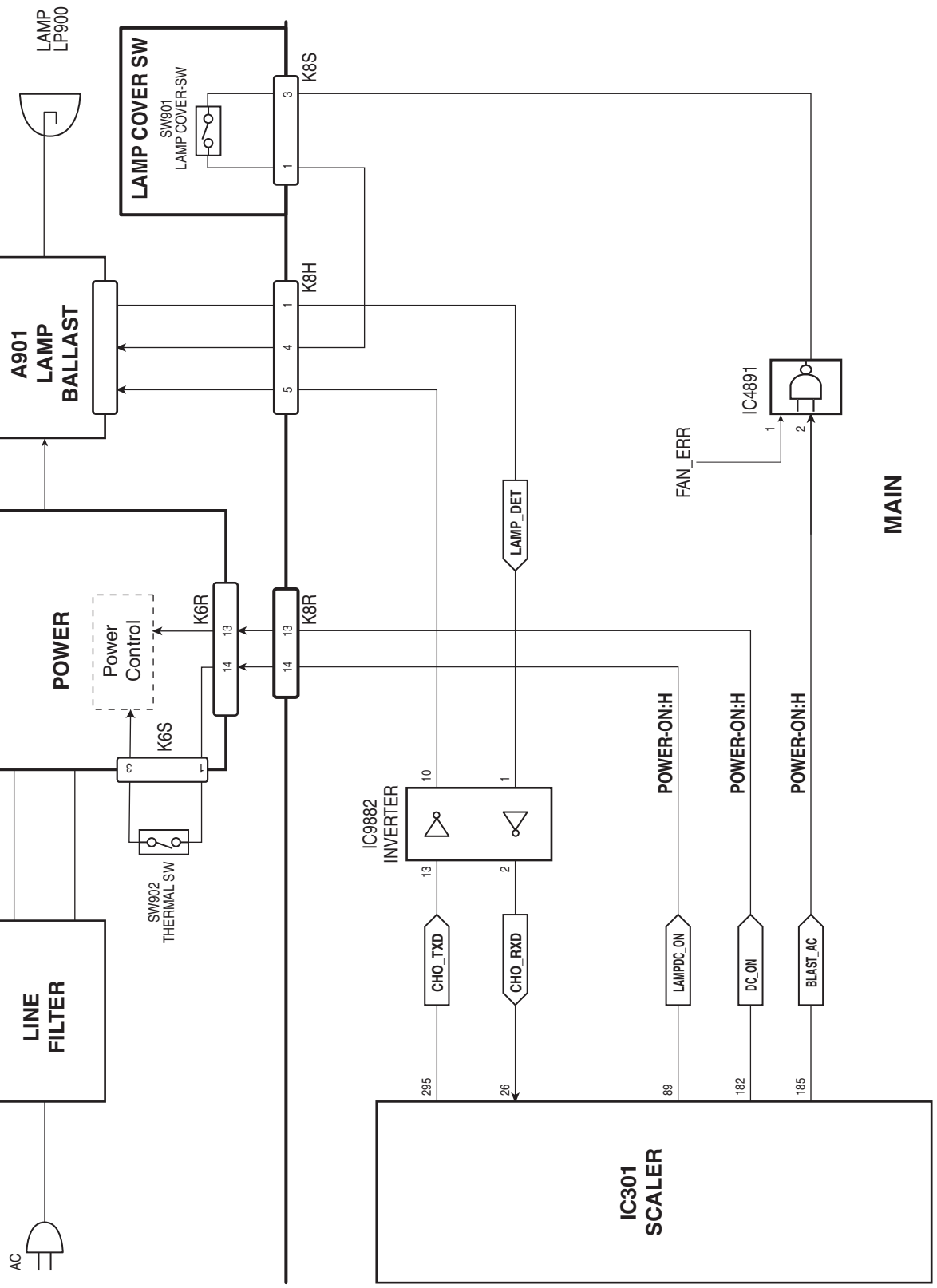
Chassis over view



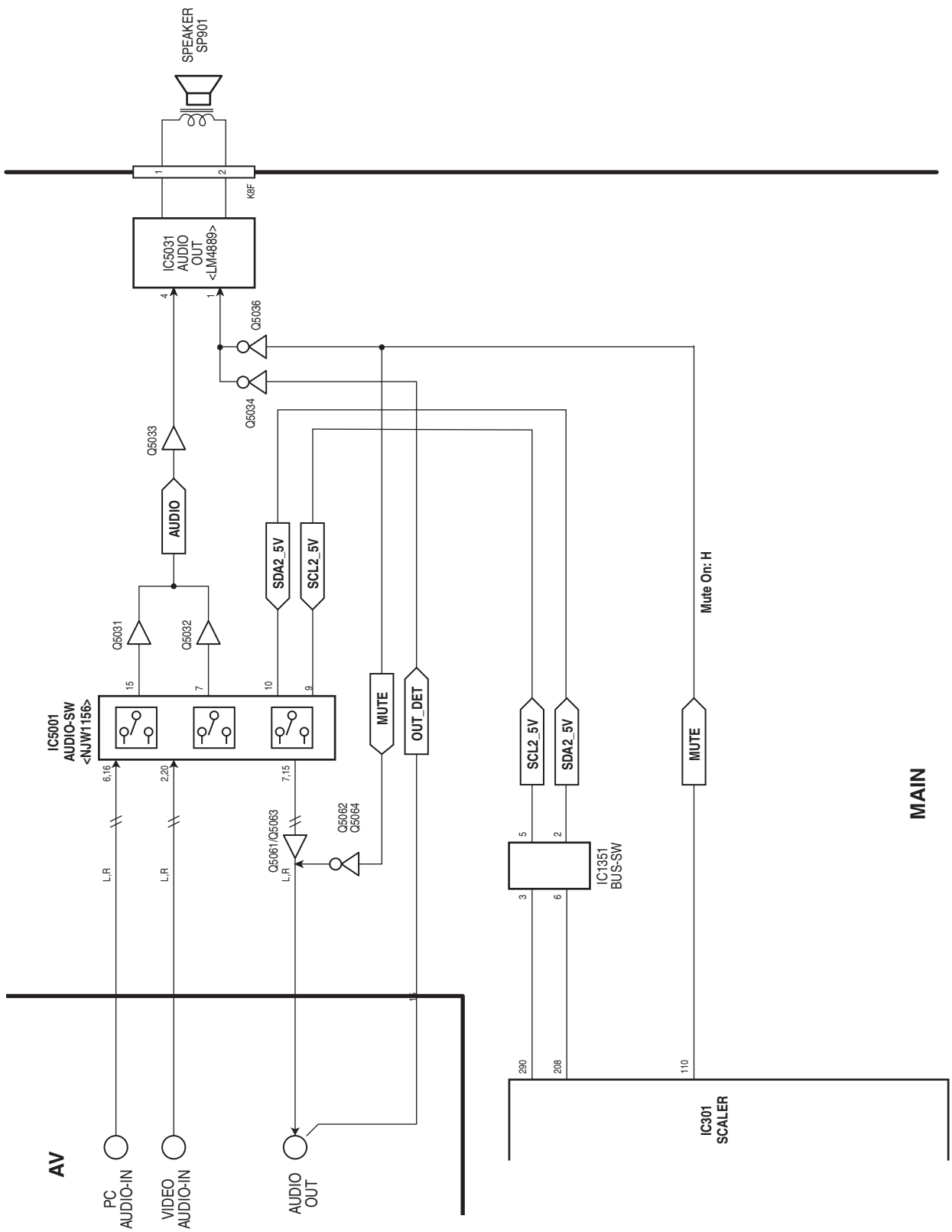
System control



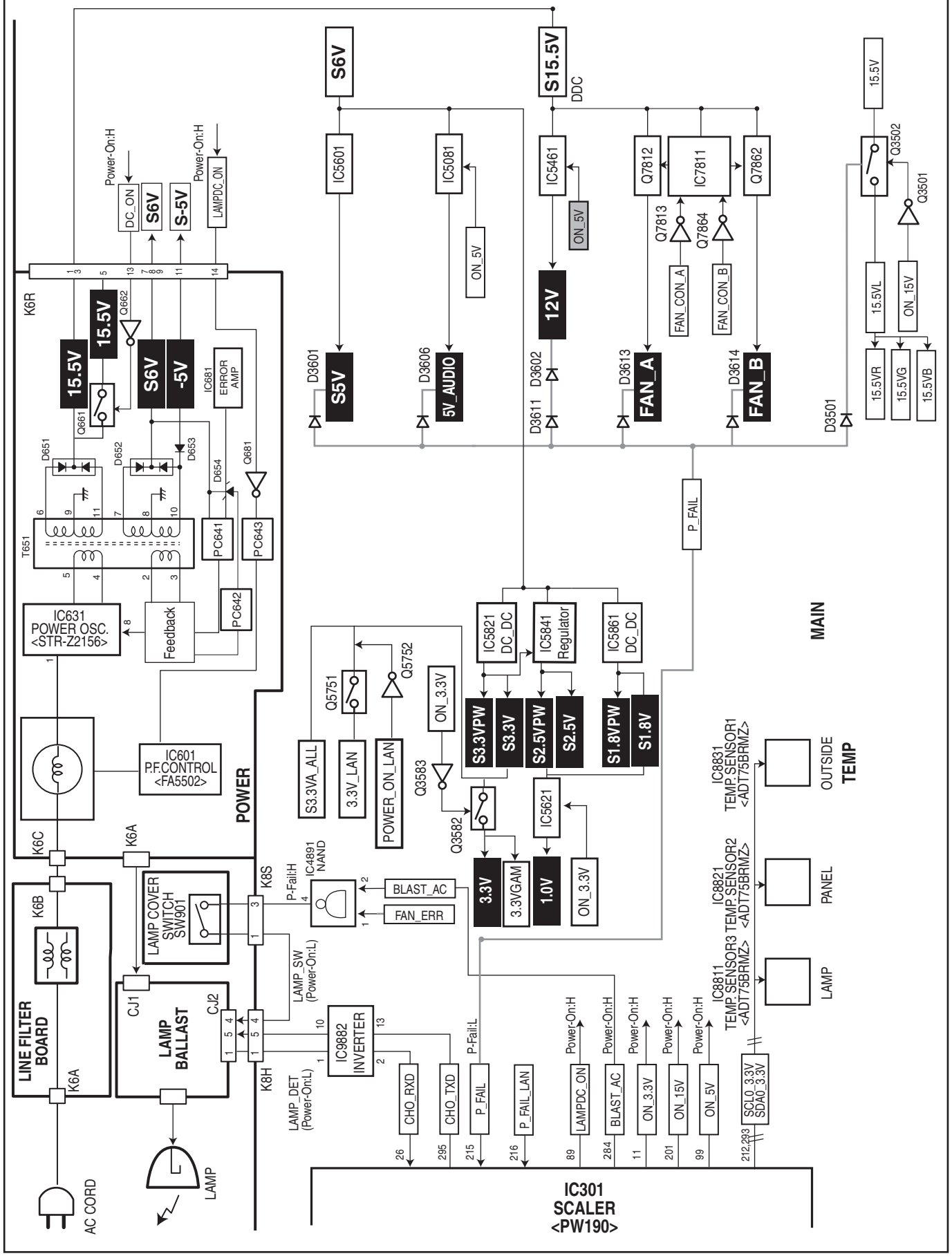
Lamp control



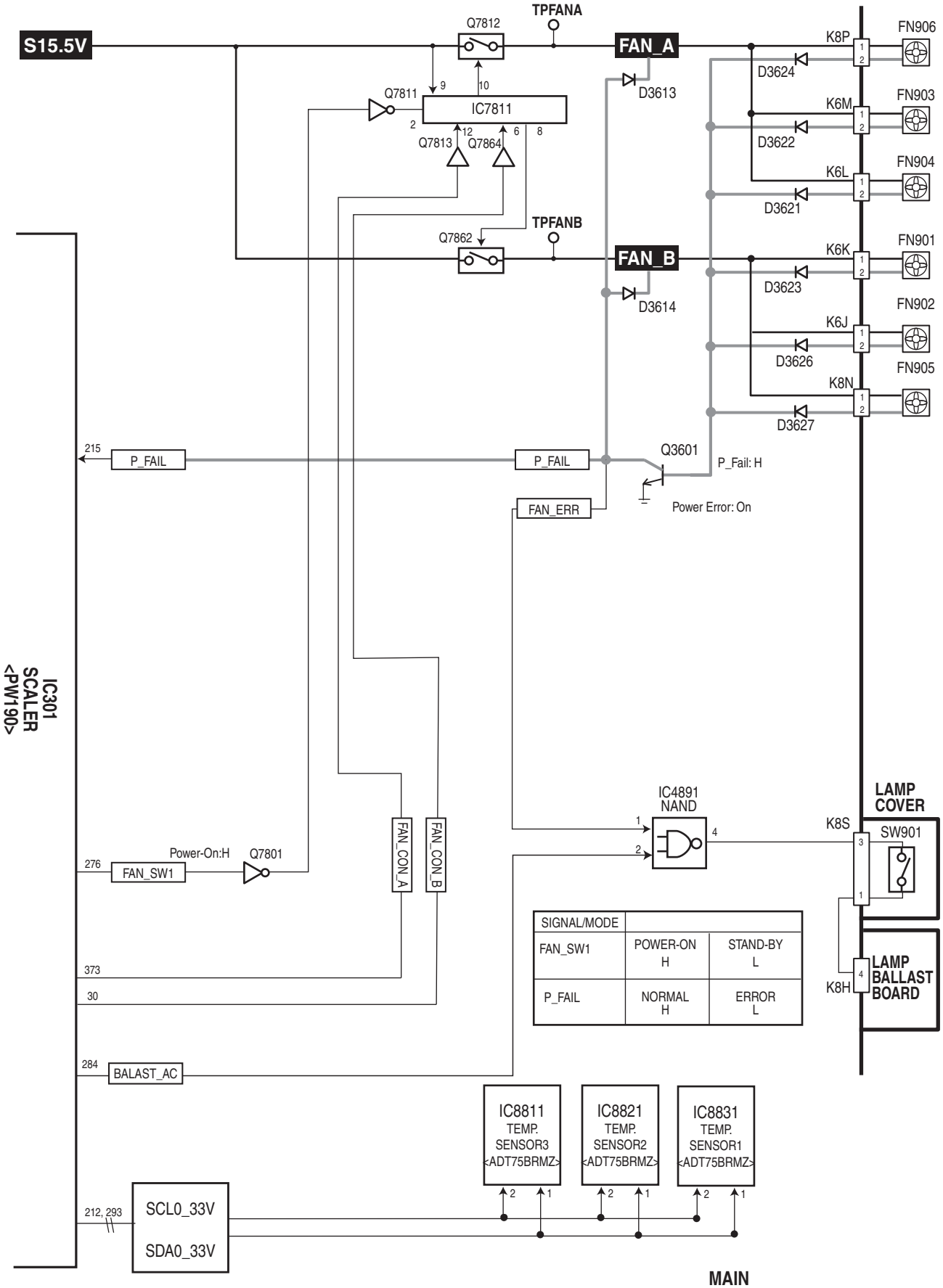
Audio circuit



Power supply & protection circuit

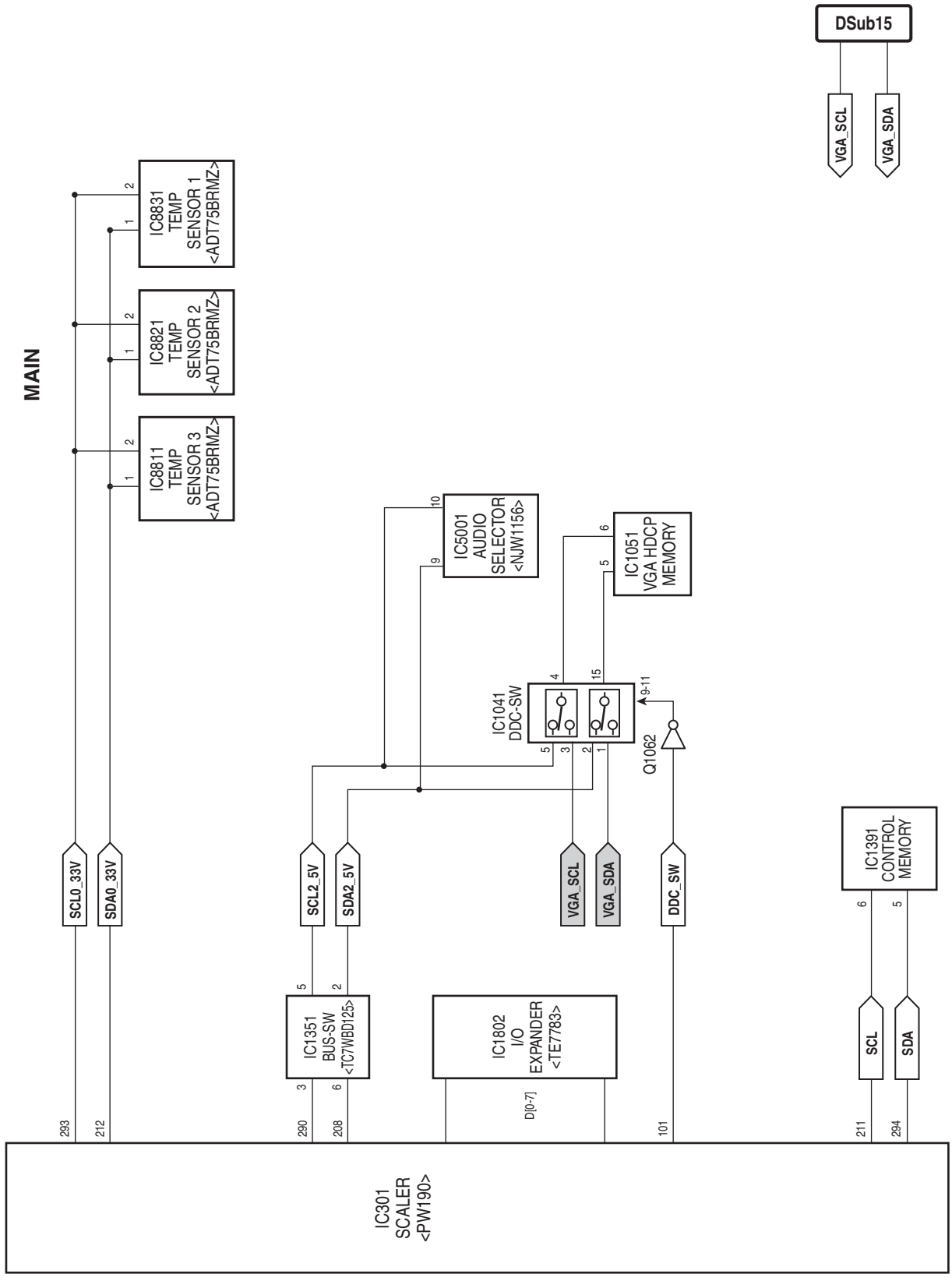


Fan control circuit



SIGNAL/MODE		
FAN_SW1	POWER-ON H	STAND-BY L
P_FAIL	NORMAL H	ERROR L

IIC bus control circuit



Troubleshooting

Indicators and Projector Condition

Check the indicators for projector condition.

Indicators			Projector Condition
POWER red/green	WARNING red	LAMP REPLACE yellow	
●	●	●	The projector is off. (The AC power cord is unplugged.)
◍ (blinking)	●	✱	The projector is preparing for stand-by or the projection lamp is being cooled down. The projector cannot be turned on until cooling is completed.
◍	●	✱	The projector is ready to be turned on with the POWER ON/STAND-BY button.
○	●	✱	The projector is operating normally.
○ (blinking)	●	✱	The projector is in the Power management mode.
◍ (blinking)	◍ (blinking)	✱	The temperature inside the projector is abnormally high. The projector cannot be turned on. When the projector is cooled down enough and the temperature returns to normal, the POWER indicator lights red and the projector can be turned on. (The WARNING indicator keeps blinking.)
◍	◍ (blinking)	✱	The projector has been cooled down enough and the temperature returns to normal. When turning on the projector, the WARNING indicator stops blinking. Check and clean the air filters.
●	◍	✱	The projector detects an abnormal condition and cannot be turned on. Unplug the AC power cord and plug it again to turn on the projector. If the projector is turned off again, unplug the AC power cord and contact the dealer or the service center for service and checkup. Do not leave the projector on. It may cause an electric shock or a fire hazard.

○ • • • green. ◍ • • • red ● • • • off

○ (blinking) • • • blinks green. ◍ (blinking) • • • blinks red.

✱ When the life of the projection lamp draws to an end, the LAMP REPLACE indicator lights yellow. When this indicator lights yellow, replace the projection lamp with a new one promptly. Reset the lamp replacement counter after replacement of the lamp.

No Power

This projector provides a function which can be specified a defective area simply by indicating the LEDs. Connect the AC cord and press the Power button once and then check the LED indication.

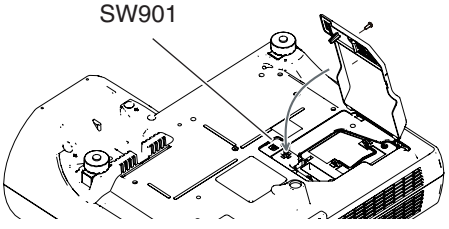
- **When all of LED indicators are not lighting**, the symptom indicates that the primary power supply circuit does not operate properly. Check the power primary circuit and parts as follow;
  AC cord, F601 (Fuse), Power board,
  SW902 (Thermal sw.) short in normal
  SW902 opens when the surrounding temperature of the switch exceeds 105°C.

- **When the WARNING (red) and POWER(red) indicators are flashing**, the symptom indicates that the projector detected an abnormal temperature risen inside the projector. Check the air filters and remove the object near the intake and exhaust fan openings, and wait until the POWER indicator stops flashing, and then try to turn on the projector.
  The internal temperature is monitored by sensor ICs, IC8811(Lamp), IC8821 (Panel) and IC8831 (Room) on the Main board

- **When the WARNING indicator lights red**, the symptom indicates that the projector detected an abnormality in the cooling fan operation or in the power supply secondary circuits. Check fan operation and power supply lines, and the driving signal status.
  The P_FAIL_LAN (Error:L) is sent to pin 216 of IC301 <SCALER> when the abnormality occurs inside the projector, and then the IC301 sends the shutdown signal, LAMPDC_ON, to the power supply circuit to stop its operation, and signal BALAST_AC to the lamp ballast board via IC4891 and SW901<lamp cover switch> to stop operation of the lamp circuit.
  An abnormality occurs on the LAN Power Supply.
  Check power supply of LAN circle, Power_On_LAN signal (Power_On:H) is output from pin 183 of IC301 and switches Q5752 3.3V_LAN power supply cicuit.
  The P_FAIL signal (Error: L) is sent to pin 215 of IC301<SCALER> when the abnormality occurs inside the projector, and then the IC301 sends the shutdown signal, LAMPDC_ON, to the power supply circuit to stop its operation, and signal BALAST_AC to the lamp ballast board via IC4891 and SW901<lamp cover switch> to stop operation of the lamp circuit.
  An abnormality occurs on the secondary power supply;
  Check power supplies S15.5V, 15.5V, S6V, S-5V. P_FAIL signal becomes “Low” when the abnormality occurs on any of the power supply lines.
  An abnormality occurs on the fan control circuit;
  Check FN901, FN902, FN903, FN904, FN905, FN906 and peripheral circuit.
  If any of the fans has an error, the fan lock signal drives Q3601 becomes on. As the result, signal FAN_ERR becomes Low and is sent to lamp ballast board to stop lamp circuit.
  An abnormality occurs on the drive signals;
  ON_15V signal (Power-on: H) is output from pin 201 of IC301 and switches Q509,15.5V supply circuit. ON_5V signal (Power-on: H) is output from pin 99 of IC301 and switches IC5461, 12V supply circuit and switches IC5081, 5V_AUDIO supply circuit. ON_3.3V signal (Power-on: H) is output from pin 11 of IC301 and switches Q3582, 3.3VGAM supply circuit and IC5621, 1.0V supply circuit.
  LAMPDC_ON signal (Power-on: H) is output from pin 89 of IC301 and supplied to the P.F Control IC, IC621, on the power supply board through Q651, and PC643.
  BALAST_AC signal (Power-on: H) is output from pin 284 of IC301 and applied to pin 2 of IC4891 and output pin 4 and then supplied to the lamp ballast board through SW901<Lamp Cover SW>.
  CHO_RXD signal at pin 26 of IC301 is applied from the lamp ballast unit. If the abnormality occurred on the lamp ballast unit, LAMP_DET/CHO_RXD signal becomes “High” and then IC301 shuts down the power supply circuit.

Lamp Cover switch

Make sure that the lamp cover is mounted correctly. If not or the lamp cover removed, the lamp does not light on for the safety. Check the lamp cover and lamp cover switch (SW901).



No Picture

Check following steps.

No picture with all of input sources

Yes →

Check signal processing stage and LCD driving stage;
- Check RGB S&H signals at test points TP35B, TP35G, TP35R.
- Check power supply circuit 15.5V and peripheral circuit.
- Check ICs IC501, IC531, IC561, IC401, IC301 and peripheral circuits.

No ↓

No picture with PC1 input source only

Yes →

Check RGB signals on PC1.
- R signal is applied to pin 82 of IC301<System Control>, G signal is applied to pin 260 and B signal is applied to pin 258 of IC 301.
- HV sync signals are applied to pins 331 and 161 of IC301<System Control> as the HS and VS signals.

No ↓

No picture with PC2 input source only

Yes →

Check RGB signals on PC2.
- R2 signal is applied to pin 172 of IC301<System Control>, G2 signal is applied to pin 78 and B2 signal is applied to pin 256 of IC 301.
- HV sync signals are applied to pins 253 and 66 of IC301<System Control> as the HS2 and VS2 signals.

No ↓

No picture with video input sources

Yes →

Check AV Source Selecting and decoding state;

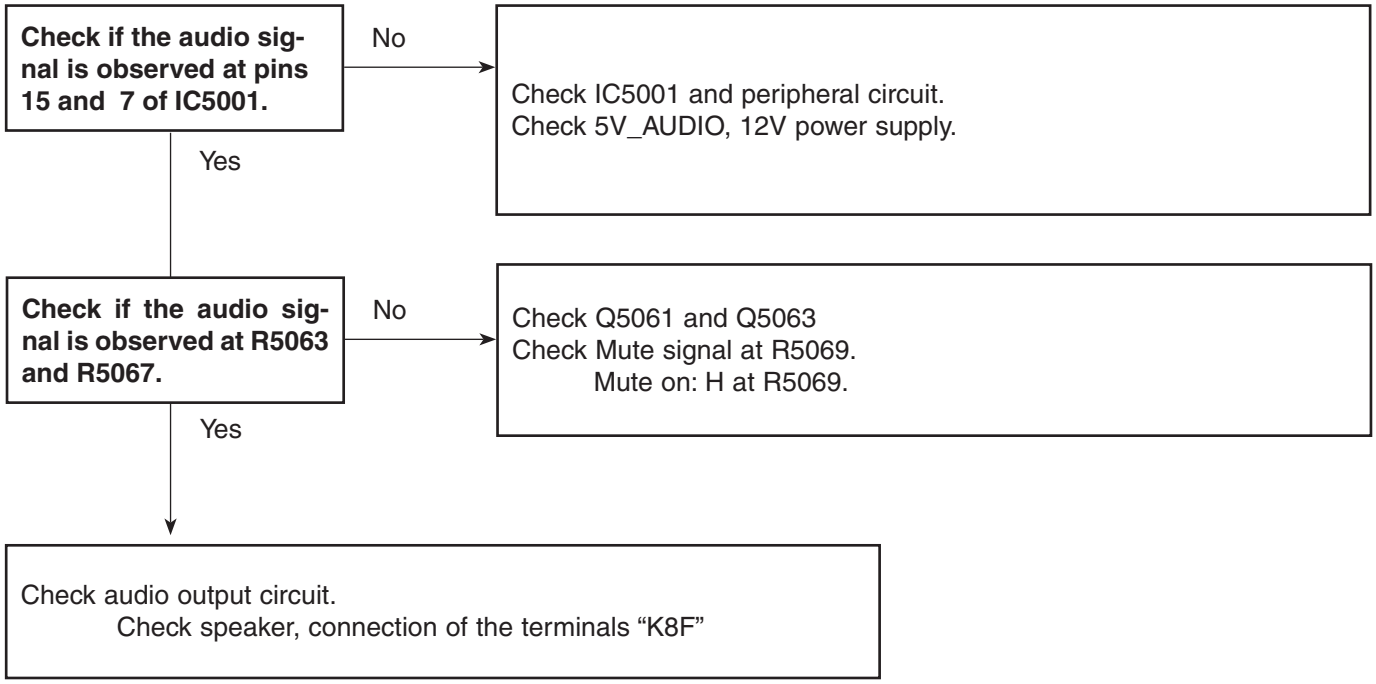
S-Video source
- Check S-video signal (Y/C).
- S_C signal is applied to pin 265 of IC301<System Control>, and S_Y signal is applied on pin 264 of IC301.

S-SW signal (S-Video:L) is input to pin 267 of IC301<System Control>.

Composite video source
- Check composite video signal (Video).
- The composite video signal is applied to pin 262 of IC301<System Control>.

No Sound

Check following steps.


Check if the audio signal is observed at pins 15 and 7 of IC5001.
No
Check IC5001 and peripheral circuit.
Check 5V_AUDIO, 12V power supply.
Yes
Check if the audio signal is observed at R5063 and R5067.
No
Check Q5061 and Q5063
Check Mute signal at R5069.
Mute on: H at R5069.
Yes
Check audio output circuit.
Check speaker, connection of the terminals “K8F”

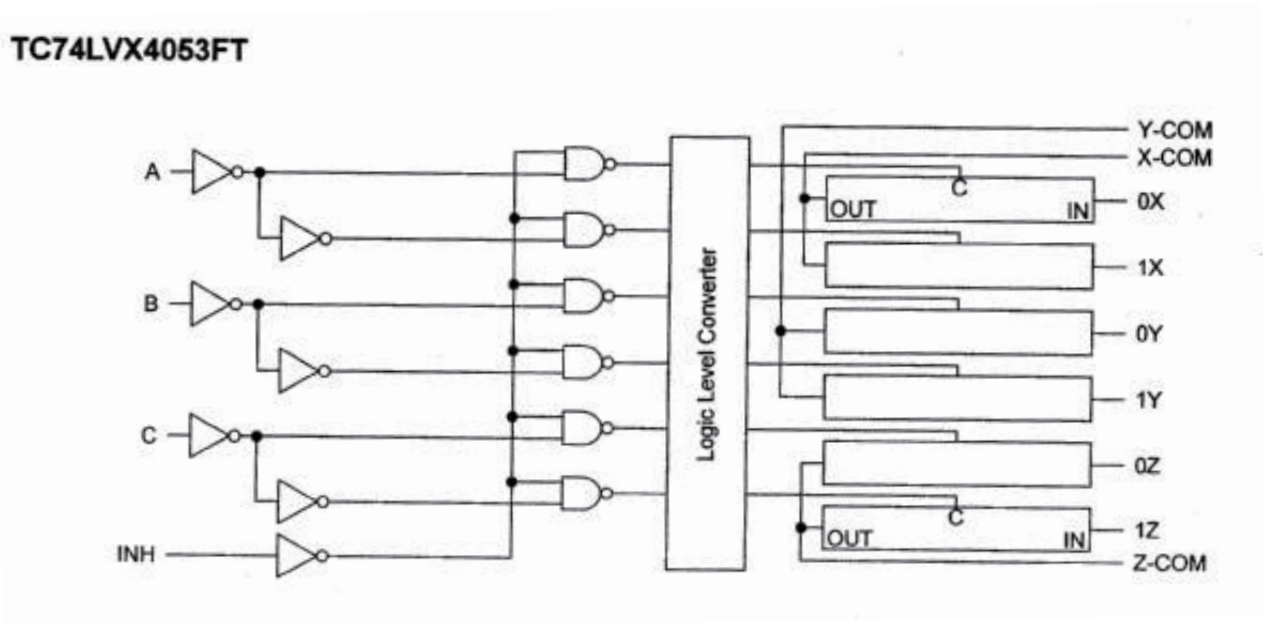
Control Port Functions

Scaler I/O Port Functions (PW190)

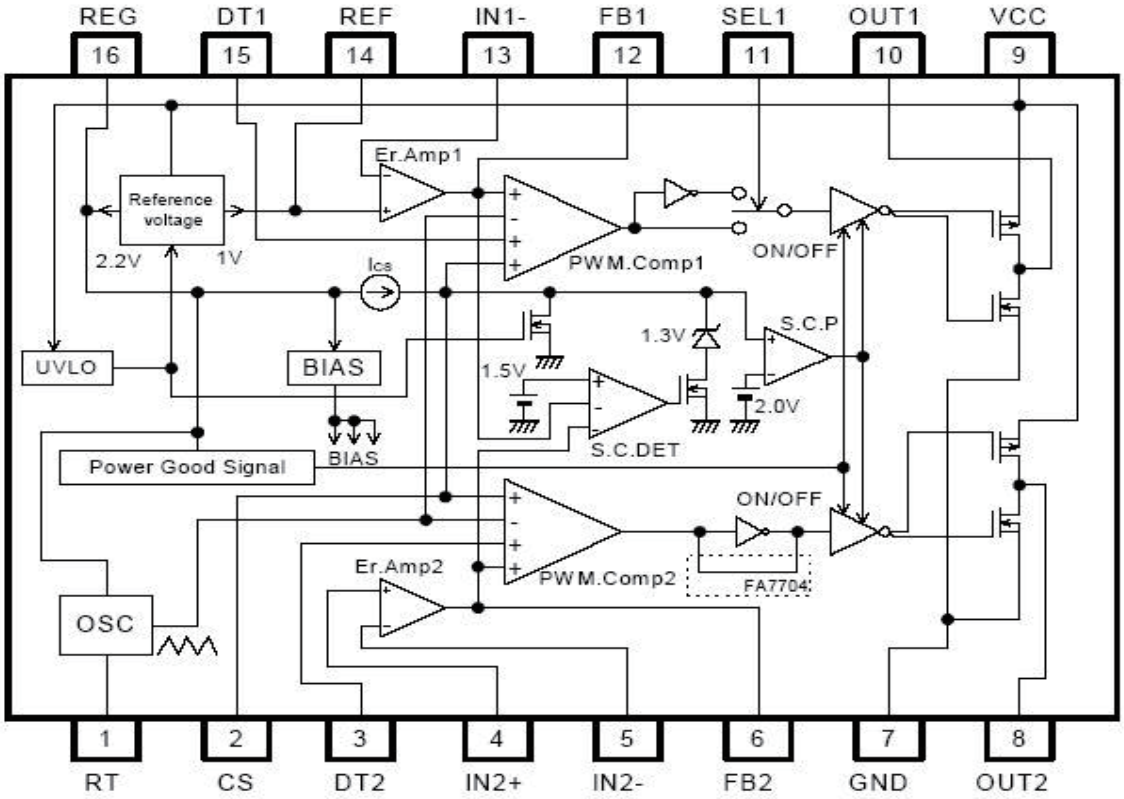
PIN NO.	PORT NO.	PORT NAME	FUNCTION	SIGNAL NAME	DESCRIPTION	I/O
11	A11	PORTC5		ON_33V	3.3V Power Drive, Power On: H	O
101	B2	PORTD6	DDC_SW	DDC_SW	DDC_SW	O
110	B11	PORTC6		MUTE	Sound Mute Drive, Mute On:H	O
111	B12	PORTC1		SCS_PW	3-Wired Serial Control	O
124	B25	TXD_PW		TXD_PW	Serial Control TXD	O
3	C1	PORTE3		ON_50V	5V Power Drive, Power On:H	O
201	C11	PORTC7		ON_150V	15V Power Driver, Power On: H	O
202	C12	PORTC2		SDATA_PW	3-Wired Serial Control Data	O
208	C18	PORTH5	2-Wire Serial Data 2	SDA2	IIC Bus Control Data	O
211	C21	PORTH2	2-Wire Serial Clock 1	SCL1	IIC Bus Control Clock	O
212	C22	TWOWSD0	2-Wire Serial Data 0	SDA0	IIC Bus Control Data	O
28	C26	ADC1	ADC1	KEY1	Key Control Input	I
32	D1	PORTE6		TEMP_LED	TEMP LED Drive, On:H	O
31	D2	PORTE4		POWER_LED	POWER LED Drive, On: H	O
30	D3	PORTE1		FAN_SW1	Fan Control Switch 1	O
284	D11	PWM1		BLAST_AC	Lamp Control, Lamp Om: H	O
285	D12	PORTC3		LAMP_DET	Lamp Detect	I
290	D17	PORTH4	2-Wire Serial Clock 2	SCL2	IIC Bus Control Clock	O
293	D20	PORTH6		SCL0	IIC Bus Control Clock	O
294	D21	PORTH3	2-Wire Serial Data 1	SDA1	IIC Bus Control Data	O
215	D24	ADC0	ADC0	P_FAIL	Power Failure Signal Input, Failure:L	I
126	D25	ADC2	ADC2	KEY2	Key Control Input	I
180	E2	PORTE7		LAMP_LED	Lamp LED Drive. On: H	O
275	E3	PORTE5		READY_LED	READY LED Drive, On: H	O
353	E5	PORTE0		Power_KEY		O
362	E14	PORTC4		IRM_RST		O
363	E15	PORTC9		SRCS	Serial interface chipselect for read function	O
368	E20	RXD_PW		RXD_PW	Serial Control RXD	I
127	E25	ADC7	ADC7	LENS Option	Option Switch LENS	I
30	E26	DAC1	DAC1	FAN_CON_B	Fan B Voltage Control	O
298	F23	ADC4	ADC4	BRAND Option	Option Switch BRAND	I
373	H22	DAC0	DAC0	FAN_CON_A	Fan A Voltage Control	O
90	M1	PORTA0		PW_UPDATE		O
183	M2	PORTA1		POWER_ON_LAN	3.3V_LAN Driver, Power on: H	O
89	N1	PORTA3		LAMPDC_ON	Power Control, Power On: H	O
192	N2	PORTA5		DC_ON	15.5V Power Driver, Power On: H	O
267	N3	PORTA6		S_SW	S-Video Input Switch	I
232	N4	PORTA7		MONITOR_OUT	Monitor Out	O
413	N5	PORTA4		SRDATA	3-wired Serial Control Data	O
474	N6	PORTA2		PW_NET_H/L	PW_NET_H/L	O

IC Block Diagrams

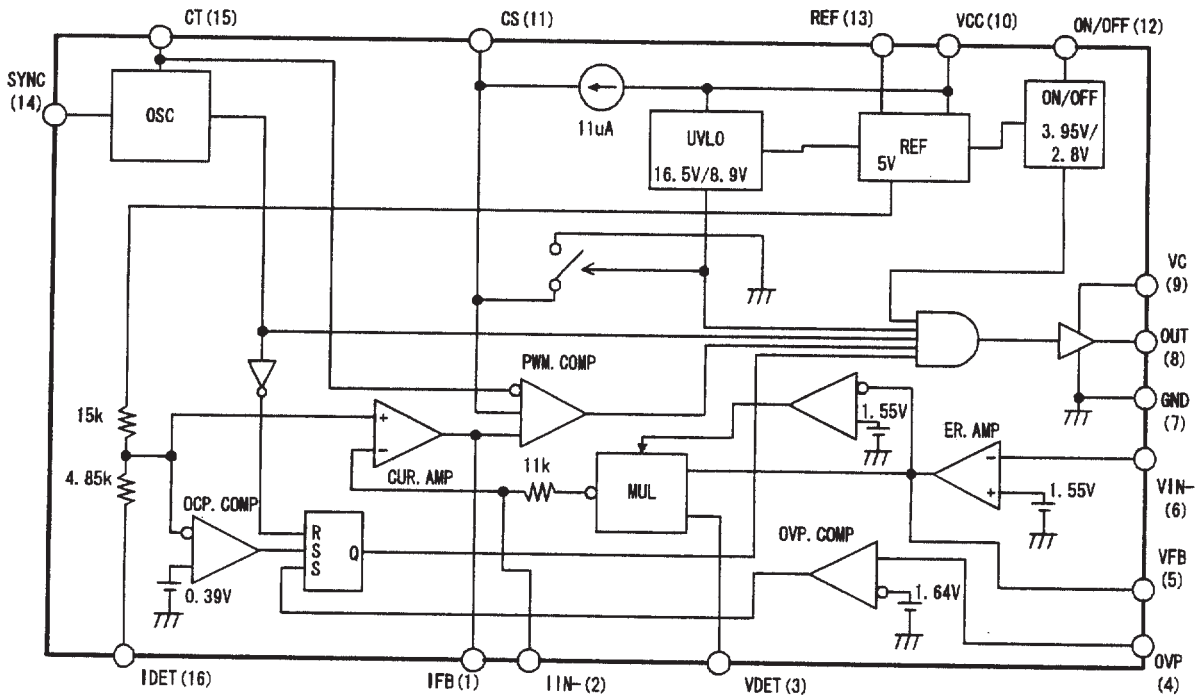
● TC74LVX4053 <Analog Multiplexer/Demultipexer, IC1041>



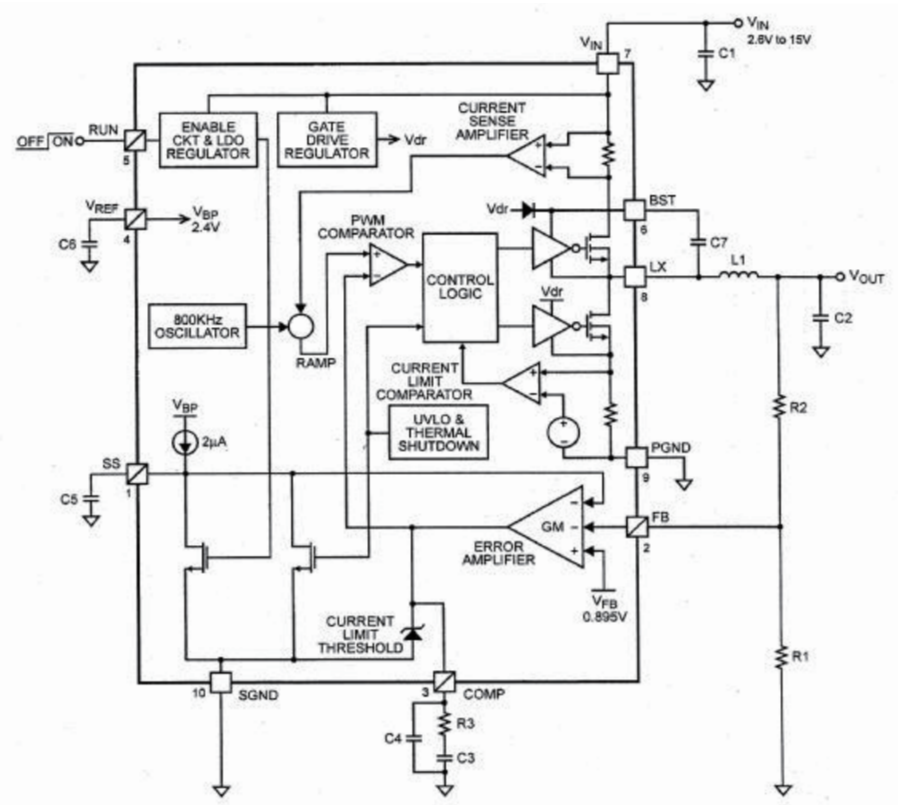
● FA7703<DDC Control, IC7811>



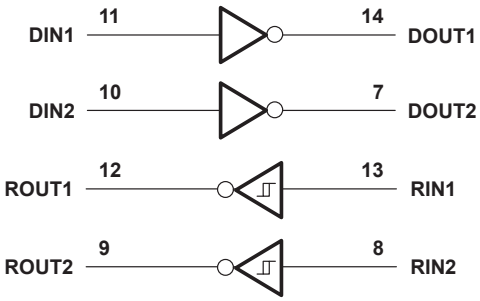
● FA5502 <P.F. Control, IC621>



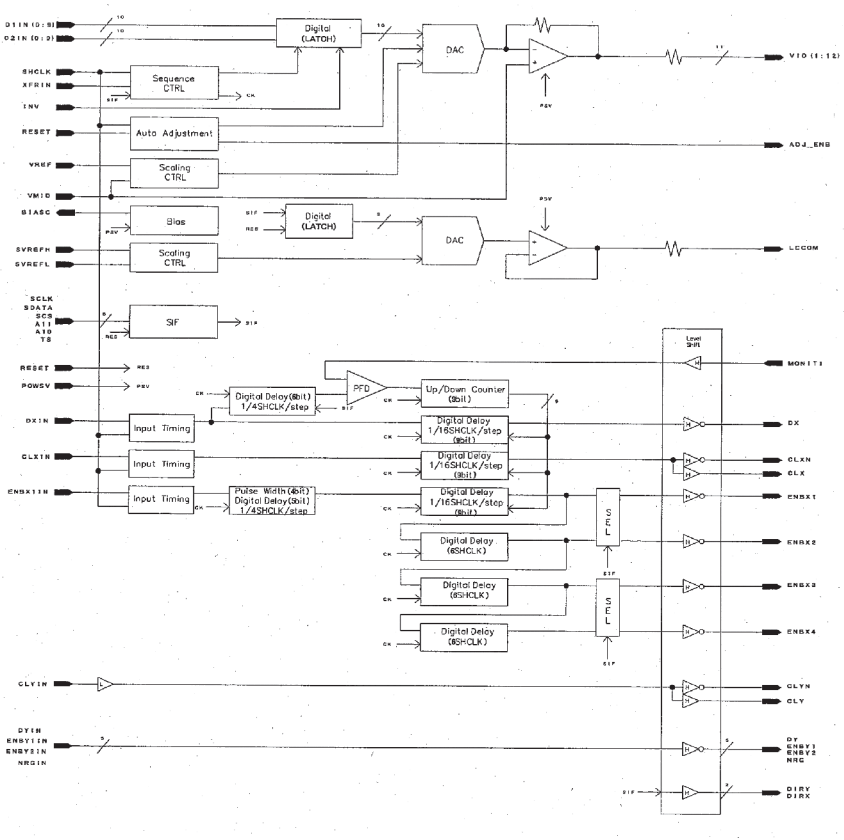
● MP2106 <DC-DC Converter, IC5821, IC5861>



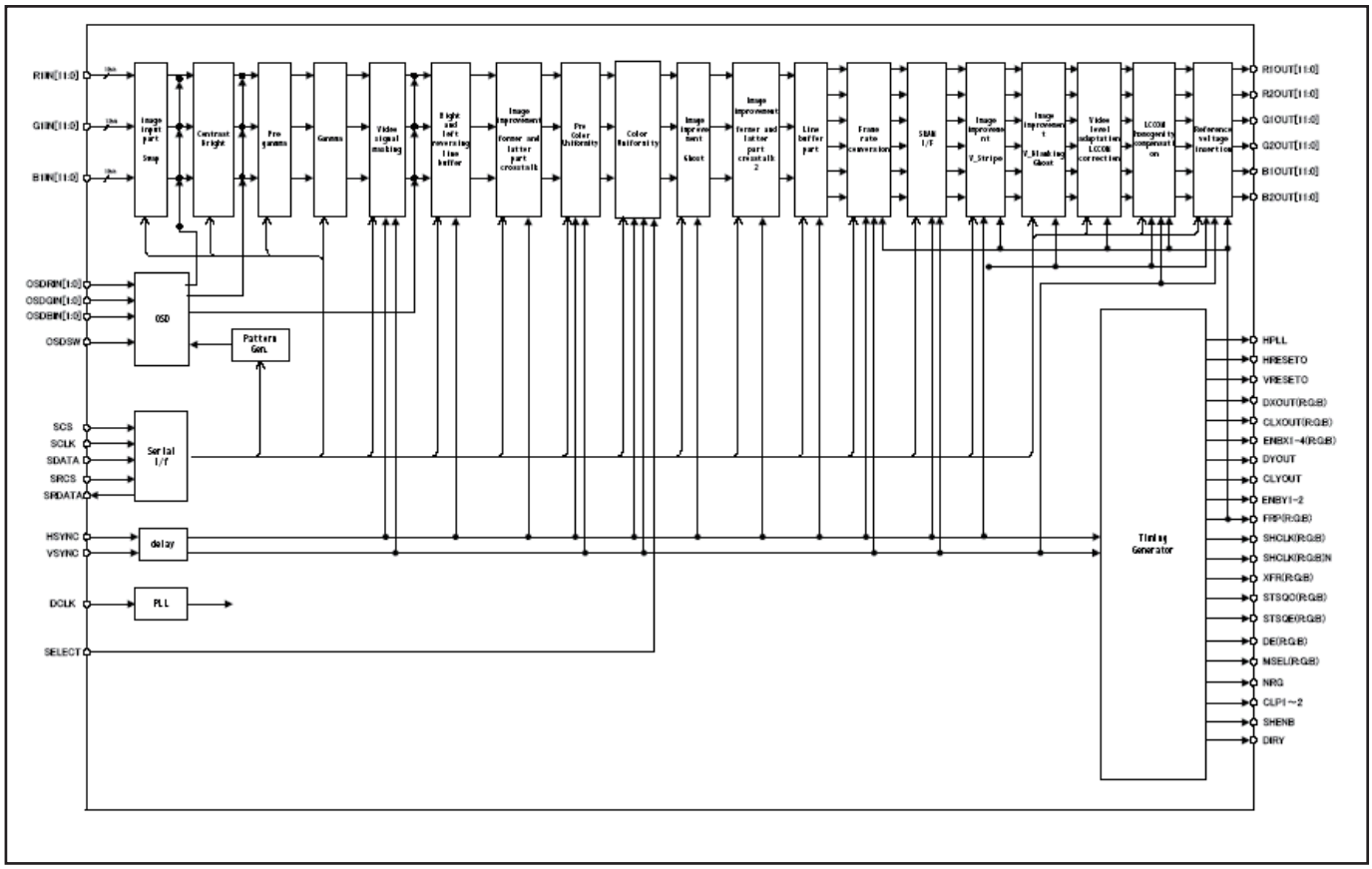
● MAX232ECPWR <RS-232C Driver, IC3801>



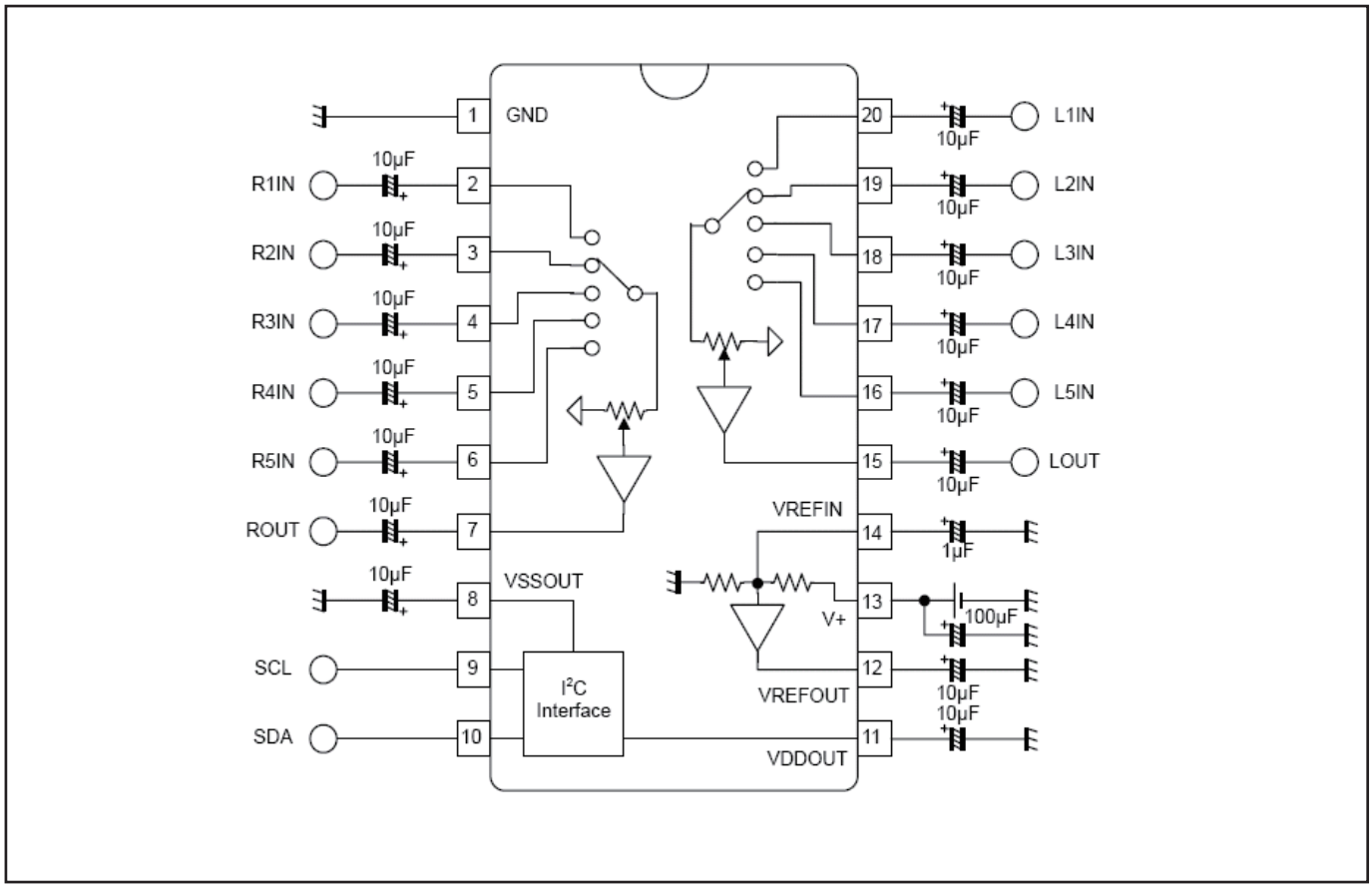
● L3E06170 <D/A, S/H-LCD Driver, IC501, IC531, IC561>



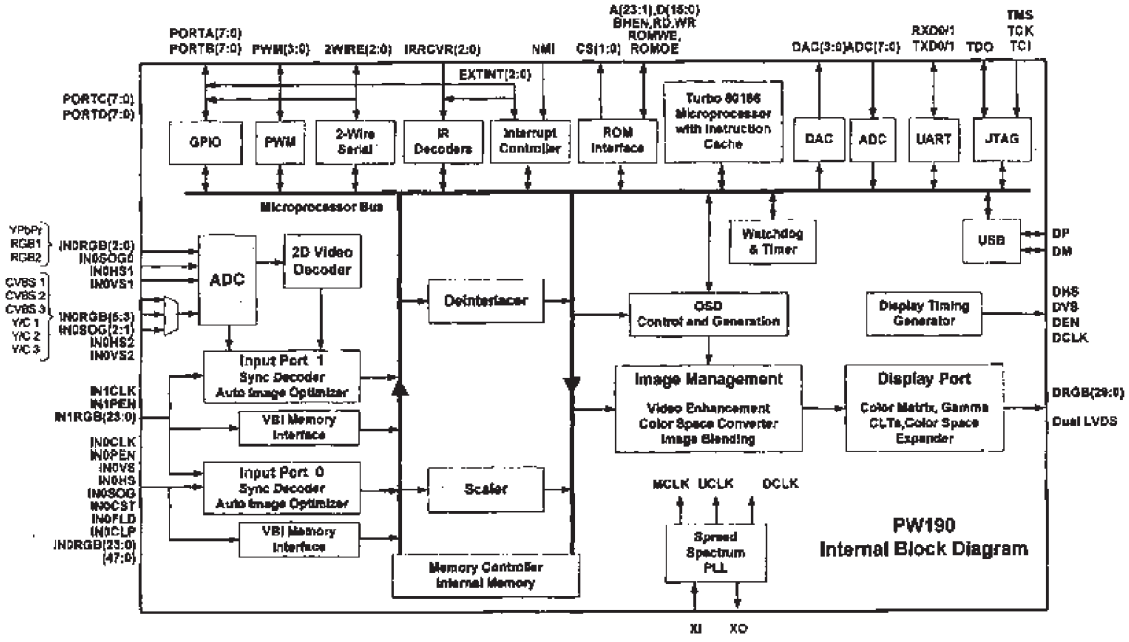
● L3E07111 <LCD Driver & Gamma Correction, IC401>



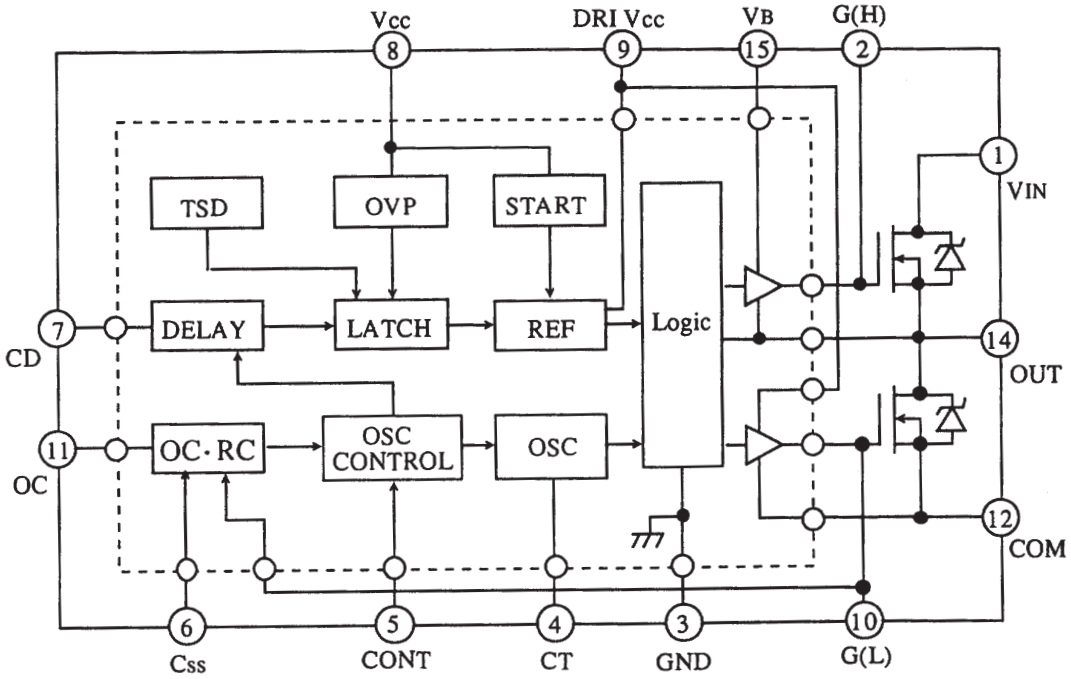
● NJW1156 <Audio Control, IC5001>



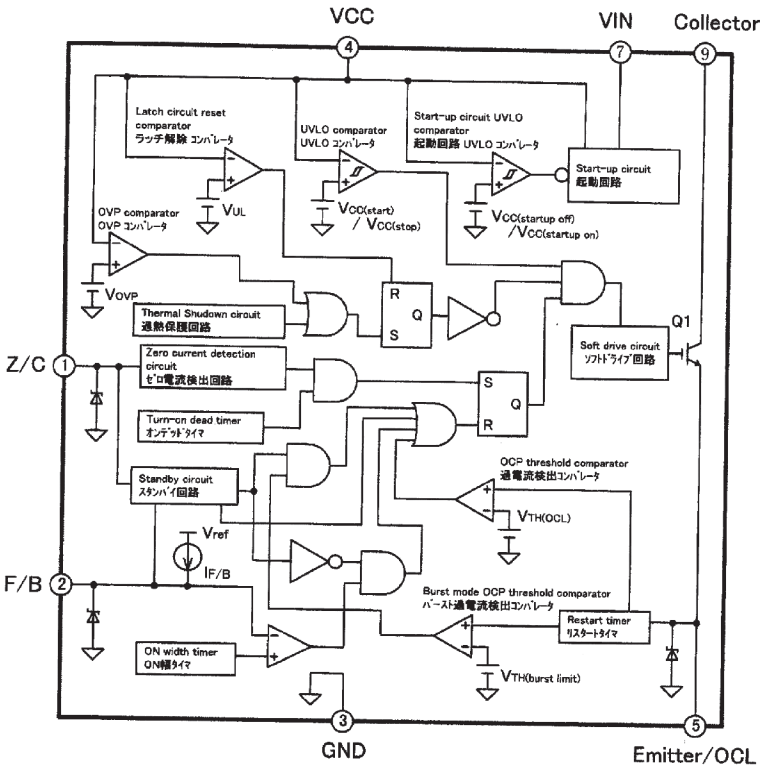
● PW190 <System Control, ADC, Video Decoder, Scaler, IC301>



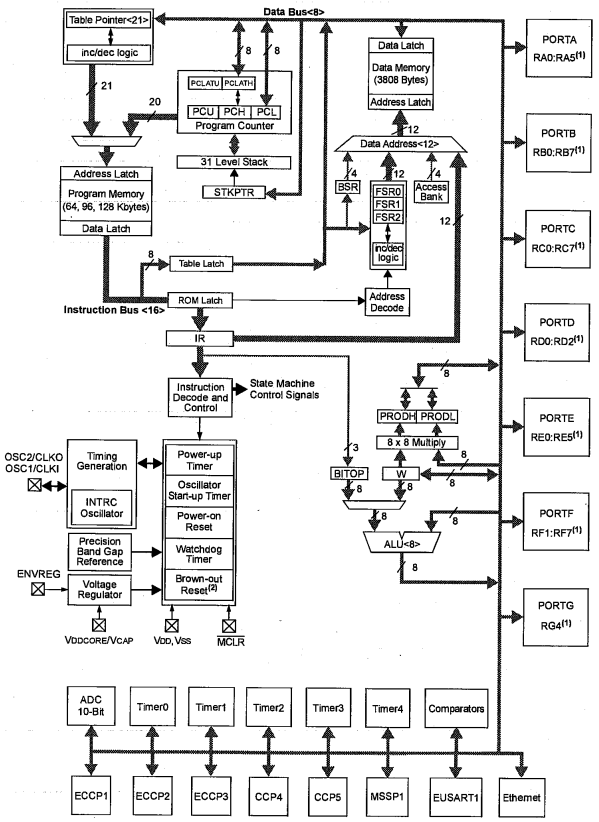
● STR-Z2156<Power OSC, IC631>



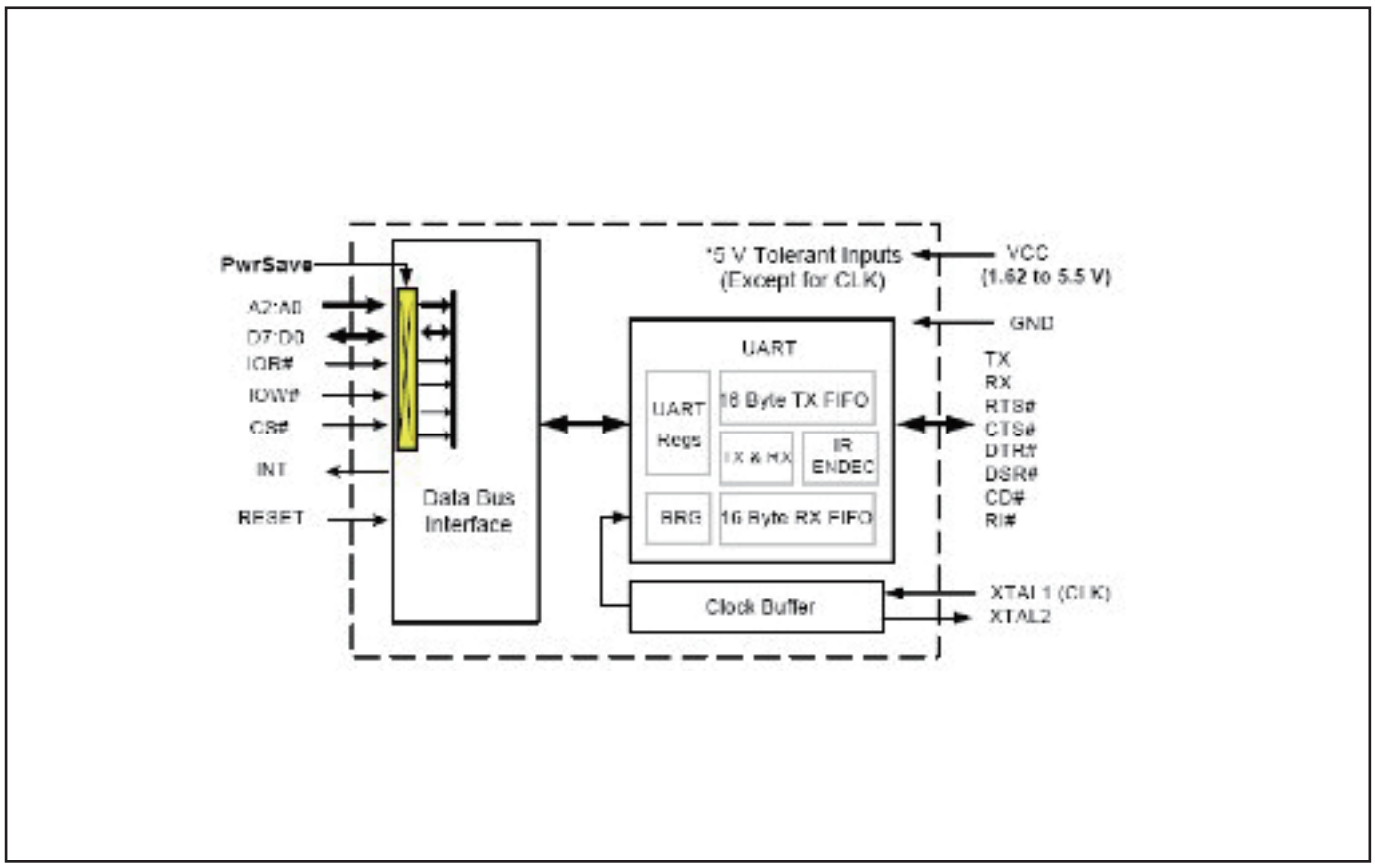
● MR4010 <Power OSC, IC631>



● PIC18F67J60<LAN CONTROL,IC8801>



● XR16L5701IL24 <UART, IC9885>



Electrical Parts List

Product safety should be considered when a component replacement is made in any area of a projector.
Components indicated by a ⚠ mark in this parts list and the circuit diagram show components whose value have special significance to product safety. It is particularly recommended that only parts specified on the following parts list be used for components replacement pointed out by the mark.

● Read Description in the parts list

Read description in the Capacitor and Resistor as follows:

CAPACITOR CERAMIC 100P K 50V

Rated Voltage

Tolerance Symbols:

Less than 10pF

A : Not specified	B : ±0.1pF	C : ±0.25pF
D : ±0.5pF	E : +0 -1pF	F : ±1PF
G : ±2pF	H : +0.1 -0pF	L : +0 -0.1pF
R : ±0.25 -0pF	S : +0-0.25pF	

More than 10pF

A : Not specified	B : ±0.1%	C : ±0.25%
D : ±0.5%	F : ±1%	G : ±2%
H : ±3%	J : ±5%	K : ±10%
L : ±15%	M : ±20%	N : ±30%
P : +100-0%	Q : +30-10%	T : +50-10%
U : +75-10%	V : +20-10%	W : +100-10%
X : +40-20%	Y : +150-10%	Z : +80-20%

Rated value: P=pico farad, U=micro farad

Material:

CERAMIC..... Ceramic
MT-PAPER..... Metallized Paper
POLYESTER..... Polyester
MT-POLYEST.....Metallized Polyester
POLYPRO..... Polypropylene
MT-POLYPRO....Metallized Polypropylene
COMPO FILM.....Composite film
MT-COMPO.....Metallized Composite
STYRENE.....Styrene
TA-SOLID..... Tantalum Oxide Solid Electrolytic
AL-SOLID..... Aluminium Solid Electrolytic
ELECT..... Aluminum Foil Electrolytic
NP-ELECT.....Non-polarised Electrolytic
OS-SOLID..... Aluminium Solid with Organic Semiconductive Electrolytic
POS-SOLID..... Polymerized Organic Semiconductive
DL-ELECT..... Double Layered Electrolytic
PPS-FILM.....Polyphenylene Sulfide Film
MT-PPS-FILM.....Metalized Polyphenylene Sulfide Film
MT-PEN-FILM.....Metalized Polyethylenenaphthalate Film
CAPACITOR.....Other

RESISTOR CARBON 4.7K J A 1/4W

Rated Wattage

Performance Symbols:
A: General B: Non flammable Z: Low noise
Other: Temperature coefficient

T: ±10ppm/°C	U: ±25ppm/°C	C: ±50ppm/°C
D: ±100ppm/°C	E: ±200ppm/°C	F: ±250ppm/°C
G: ±350ppm/°C	H: ±1000ppm/°C±10%	W: ±1200ppm/°C±10%
Y: ±1400ppm/°C±10%	J: ±2000ppm/°C±10%	K: ±2400ppm/°C±10%
L: ±2700ppm/°C±10%	M: ±3000ppm/°C±10%	N: ±3300ppm/°C±10%
P: ±3600ppm/°C±10%	Q: ±3900ppm/°C±10%	R: ±4200ppm/°C±10%
S: ±4300ppm/°C±10%	V: ±4500ppm/°C±10%	X: ±8000ppm/°C±10%

Tolerance Symbols:
A: ±0.05% B: ±0.1% C: ±0.25% D: ±0.5%
F: ±1% G: ±2% J: ±5% K: ±10%
M: ±20% P: +5-15% Z: 0 ohm

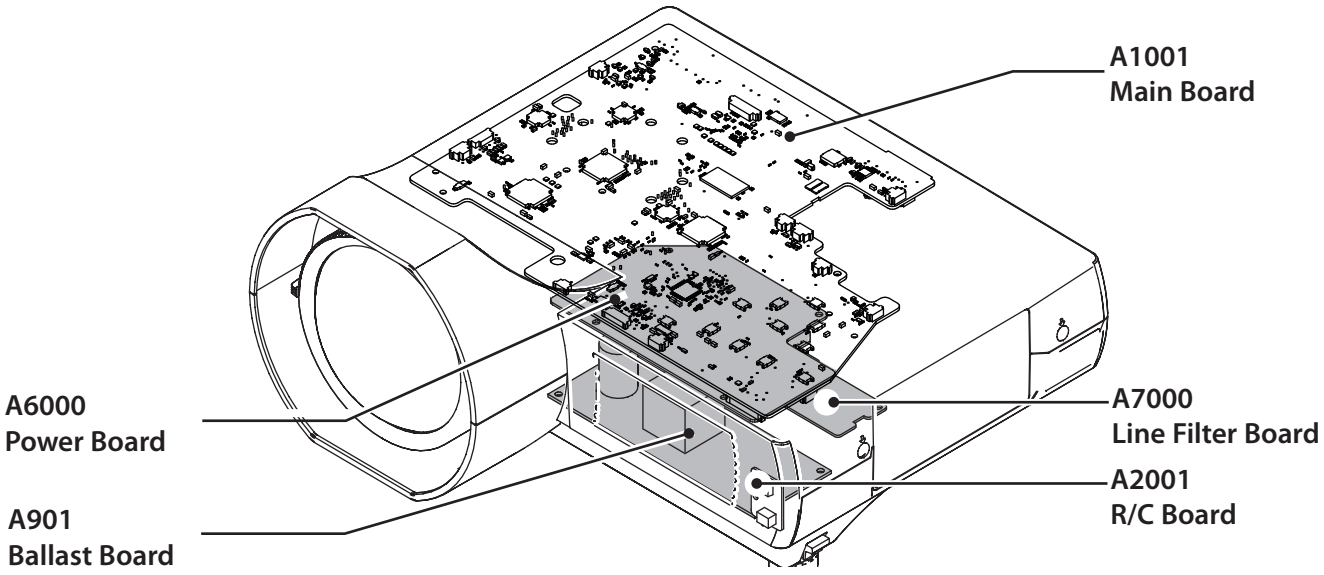
Rated value, ohms:
K: 1,000, M: 1,000,000

Material:

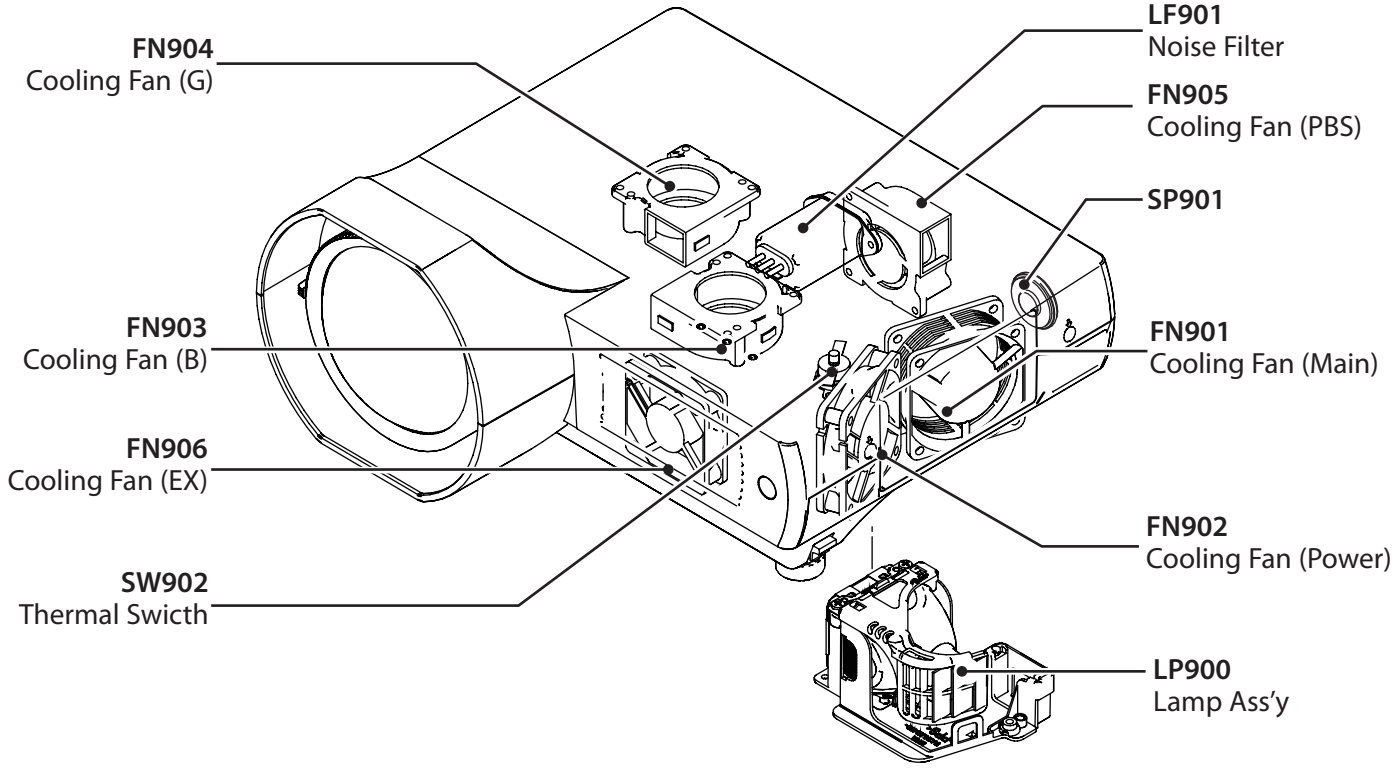
CARBON..... Carbon
MT-FILM..... Metal Film
OXIDE-MT..... Oxide Metal Film
SOLID..... Composition
MT-GLAZE..... Metal Glaze
WIRE WOUND... Wire Wound
CERAMIC RES.. Ceramic
FUSIBLE RES.... Fusible
RESISTOR ..... Other

Electrical Parts Location

● Assemblied Boards



● Out Of Circuit Board



Electrical Parts List

Note: Parts order must contain Chassis No., Part No., and Descriptions.

Key No.	Part No.	Description
ASSEMBLED BOARDS		
⚠A1001	655 003 1433	ASSY,PWB,MAIN LM5EZ
⚠A2001	655 003 1426	ASSY,PWB,R/C LM5EZ
⚠A6000	655 002 8884	ASSY,PWB,POWERKM5AD
⚠A7000	655 002 8877	ASSY,PWB,LINE FILTER KM5AD
OUT OF CIRCUIT BOARD		
⚠LF901	945 078 6472	UNIT,NOISE FILTER
⚠LP900	610 332 3855	PAO-LMP106
⚠A901	945 086 0981	BALLAST
⚠A901A	910 322 7093	CABLE,BALLAST MS5A
⚠FN901	945 084 2970	MOTOR,FAN DC 2.64W
⚠FN902	945 079 7195	MOTOR,FAN DC 2.52W
⚠FN903	945 062 3104	MOTOR,FAN DC 3.6W
⚠FN904	945 062 3104	MOTOR,FAN DC 3.6W
⚠FN905	945 062 3104	MOTOR,FAN DC 3.6W
⚠FN906	945 078 5666	MOTOR,FAN DC 1.56W
SP901	652 002 4397	SPEAKER,8
⚠SW902	945 079 2527	SWITCH,THERMAL(105DEG)
655 003 1433 ASSY,PWB,MAIN LM5EZ		
TRANSISTOR		
Q1001	406 021 7804	TR 2SC4617
Q1002	406 021 7804	TR 2SC4617
Q1003	305 217 7815	TR HN1B04FE-Y TE85L
Q1004	305 217 7815	TR HN1B04FE-Y TE85L
Q1005	406 021 7804	TR 2SC4617
Q1006	305 217 7815	TR HN1B04FE-Y TE85L
Q1007	406 021 7804	TR 2SC4617
Q1008	406 021 7804	TR 2SC4617
Q1062	406 021 7804	TR 2SC4617
Q2011	406 021 7804	TR 2SC4617
Q2021	406 021 7804	TR 2SC4617
Q2031	406 021 7804	TR 2SC4617
Q3051	406 021 7804	TR 2SC4617
Q3582	305 217 6917	TR TPC6107 TE85L
Q3583	406 021 7804	TR 2SC4617
Q3601	406 021 7804	TR 2SC4617
Q3801	305 191 5814	TR 3LN01C-TB-E
Q4011	305 217 7815	TR HN1B04FE-Y TE85L
Q4012	305 134 5928	TR 2SA1037AK-T146-R
	305 147 2218	TR 2SA1037AK-S-T146
	305 173 9618	TR 2SA1235A1E
	305 173 9717	TR 2SA1235A1F
	405 220 3115	TR ISA1235AC1E
	405 220 3016	TR ISA1235AC1F
Q5031	406 021 7804	TR 2SC4617
Q5032	406 021 7804	TR 2SC4617
Q5033	406 021 7804	TR 2SC4617
Q5034	406 021 7804	TR 2SC4617
Q5036	406 021 7804	TR 2SC4617
Q5061	406 021 7804	TR 2SC4617
Q5062	406 021 7804	TR 2SC4617
Q5063	406 021 7804	TR 2SC4617
Q5064	406 021 7804	TR 2SC4617
Q5306	406 021 7804	TR 2SC4617
Q5751	305 217 6917	TR TPC6107 TE85L
Q5752	406 021 7804	TR 2SC4617
Q591	406 021 7804	TR 2SC4617
Q592	305 002 8327	TR 2SA1203-Y-TE12L
Q6845	405 221 7914	TR HN1C01FE-Y
Q6846	405 221 7914	TR HN1C01FE-Y
Q7801	406 021 7804	TR 2SC4617
Q7811	406 021 7804	TR 2SC4617
Q7812	305 217 8515	TR RSQ025P03-TR
Q7813	305 217 7815	TR HN1B04FE-Y TE85L
Q7862	305 217 8515	TR RSQ025P03-TR
Q7864	305 217 7815	TR HN1B04FE-Y TE85L
INTEGRATED CIRCUIT		
IC1051	409 697 3913	IC LE24C023M-TLM-E
IC1351	310 479 4004	IC TC7WBD125AFK
IC1391	410 656 8600	IC 24AA64T-I/MS
IC1422	309 431 4424	IC M62334FP-DF5Q
IC1424	410 666 5804	IC UPC358GR-9LG-E1-A
IC301	309 670 8419	IC PW190-10L
IC302	309 487 5727	IC TC7SZ125FU
IC3801	409 699 2815	IC MAX232ECPWR
IC4001	410 686 4702	IC EL5306IUZ-T7
IC4701	309 428 8428	IC TC7WT125FU-TE12L
IC4891	309 395 5915	IC TC7SH00FU-(TE85L)
IC5001	409 683 5716	IC NJW1156AV
IC5031	309 594 1916	IC LM4889MMX
IC5081	309 578 6210	IC PQ1M505M2SPQ
IC5461	410 656 8501	IC XC6216BC02MR
IC5601	309 578 6210	IC PQ1M505M2SPQ
IC5621	410 651 0104	IC R1131D101B-TR-F
IC5821	409 689 2115	IC MP2106DK
IC5841	309 598 5217	IC TAR5S25
IC5861	409 689 2115	IC MP2106DK
IC7811	309 675 1316	IC FA7703V-H1
IC801	410 697 2407	IC S29GL032N90TFI030KM5AZ
IC841	409 699 3010	IC PT7M7809STE
IC8801	410 690 6006	IC PIC18F67J60-I/PT-KM5YD
IC8802	410 656 8600	IC 24AA64T-I/MS
IC8803	410 681 5506	IC LE25FU106BMA-TLM-H
IC9883	309 487 5727	IC TC7SZ125FU
CAPACITOR		
C1001	303 384 4712	TA-SOLID 47U M 6.3V
	303 449 1212	POS-SOLID 47U M 6.3V
C1002	303 398 3312	ELECT 47U M 10V
	303 387 6119	ELECT 47U M 10V
C1003	303 453 8917	CERAMIC 0.1U K 16V
	303 453 8610	CERAMIC 0.1U K 16V
	303 409 3426	CERAMIC 0.1U K 16V
C1004	303 453 8917	CERAMIC 0.1U K 16V
	303 453 8610	CERAMIC 0.1U K 16V
	303 409 3426	CERAMIC 0.1U K 16V
C1005	303 453 8917	CERAMIC 0.1U K 16V
	303 453 8610	CERAMIC 0.1U K 16V
	303 409 3426	CERAMIC 0.1U K 16V
C1006	303 453 8917	CERAMIC 0.1U K 16V
	303 453 8610	CERAMIC 0.1U K 16V
	303 409 3426	CERAMIC 0.1U K 16V
C1007	303 453 8917	CERAMIC 0.1U K 16V
	303 453 8610	CERAMIC 0.1U K 16V
	303 409 3426	CERAMIC 0.1U K 16V
C1008	303 453 8917	CERAMIC 0.1U K 16V
	303 453 8610	CERAMIC 0.1U K 16V
	303 409 3426	CERAMIC 0.1U K 16V

Electrical Parts List

Key No.	Part No.	Description		
C1009	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C1013	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C1015	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C1016	303 454 0415	CERAMIC	0.068U K	16V
	303 442 0519	CERAMIC	0.068U K	16V
C1017	303 454 0415	CERAMIC	0.068U K	16V
	303 442 0519	CERAMIC	0.068U K	16V
C1018	303 454 0415	CERAMIC	0.068U K	16V
	303 442 0519	CERAMIC	0.068U K	16V
C1042	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C1051	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C1092	303 358 3215	CERAMIC	10U K	6.3V
	303 370 0018	CERAMIC	10U K	6.3V
	303 368 7319	CERAMIC	10U K	6.3V
C1301	303 392 1215	ELECT	47U M	6.3V
	303 387 5310	ELECT	47U M	6.3V
C1302	403 455 1012	CERAMIC	1U K	10V
	303 433 1112	CERAMIC	1U K	10V
C1303	303 454 0613	CERAMIC	0.01U K	50V
	303 441 9810	CERAMIC	0.01U K	50V
C1304	303 453 8511	CERAMIC	1000P K	50V
	303 454 1214	CERAMIC	1000P K	50V
	303 276 1317	CERAMIC	1000P K	50V
C1351	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C1391	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C1411	303 401 3810	ELECT	10U M	25V
	303 424 1510	ELECT	10.0U M	25V
C1412	303 401 3810	ELECT	10U M	25V
	303 424 1510	ELECT	10.0U M	25V
C1413	303 401 3810	ELECT	10U M	25V
	303 424 1510	ELECT	10.0U M	25V
C1414	303 401 3810	ELECT	10U M	25V
	303 424 1510	ELECT	10.0U M	25V
C1422	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C1423	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C1424	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C1427	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C1428	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C1429	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C1431	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C1432	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C1441	303 401 3810	ELECT	10U M	25V
	303 424 1510	ELECT	10.0U M	25V
C1442	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
	403 478 5912	CERAMIC	1U K	25V
C2001	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C2002	303 384 4712	TA-SOLID	47U M	6.3V
	303 449 1212	POS-SOLID	47U M	6.3V
C2003	303 384 4712	TA-SOLID	47U M	6.3V
	303 449 1212	POS-SOLID	47U M	6.3V
C2004	403 457 2512	CERAMIC	0.47U K	10V
	303 376 6311	CERAMIC	0.47U K	10V
C2013	403 457 2512	CERAMIC	0.47U K	10V
	303 376 6311	CERAMIC	0.47U K	10V
C2023	403 457 2512	CERAMIC	0.47U K	10V
	303 376 6311	CERAMIC	0.47U K	10V
C2891	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C2892	303 453 7217	CERAMIC	47P J	50V
	303 454 1610	CERAMIC	47P J	50V
	303 305 8812	CERAMIC	47P J	50V
C301	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C302	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C303	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C304	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C3051	303 453 6319	CERAMIC	100P J	50V
	303 454 0910	CERAMIC	100P J	50V
	303 294 6110	CERAMIC	100P J	50V
C3052	303 372 7510	CERAMIC	2.2U K	6.3V
	303 370 0216	CERAMIC	2.2U K	6.3V
C3053	403 455 1012	CERAMIC	1U K	10V
	303 433 1112	CERAMIC	1U K	10V
C306	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C3061	303 453 6319	CERAMIC	100P J	50V
	303 454 0910	CERAMIC	100P J	50V
	303 294 6110	CERAMIC	100P J	50V
C307	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C308	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C309	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C311	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C312	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V

Electrical Parts List

Key No.	Part No.	Description			Key No.	Part No.	Description		
	303 409 3426	CERAMIC	0.1U K	16V	C341	303 453 8917	CERAMIC	0.1U K	16V
C313	303 453 8917	CERAMIC	0.1U K	16V		303 453 8610	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V		303 409 3426	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V	C342	303 276 1911	CERAMIC	22P J	50V
C314	303 453 8917	CERAMIC	0.1U K	16V	C343	303 276 1911	CERAMIC	22P J	50V
	303 453 8610	CERAMIC	0.1U K	16V	C3501	303 396 9613	CERAMIC	1U K	25V
	303 409 3426	CERAMIC	0.1U K	16V		303 397 7618	CERAMIC	1U K	25V
C316	303 453 8917	CERAMIC	0.1U K	16V		403 478 5912	CERAMIC	1U K	25V
	303 453 8610	CERAMIC	0.1U K	16V	C3502	303 396 9613	CERAMIC	1U K	25V
	303 409 3426	CERAMIC	0.1U K	16V		303 397 7618	CERAMIC	1U K	25V
C317	303 453 8917	CERAMIC	0.1U K	16V		403 478 5912	CERAMIC	1U K	25V
	303 453 8610	CERAMIC	0.1U K	16V	C3503	303 381 5316	ELECT	100U M	16V
	303 409 3426	CERAMIC	0.1U K	16V		303 369 3211	ELECT	100U M	16V
C318	303 453 8917	CERAMIC	0.1U K	16V	C3504	303 396 9613	CERAMIC	1U K	25V
	303 453 8610	CERAMIC	0.1U K	16V		303 397 7618	CERAMIC	1U K	25V
	303 409 3426	CERAMIC	0.1U K	16V		403 478 5912	CERAMIC	1U K	25V
C319	303 453 8917	CERAMIC	0.1U K	16V	C3505	303 437 4614	CERAMIC	10U K	25V
	303 453 8610	CERAMIC	0.1U K	16V	C3506	303 396 9613	CERAMIC	1U K	25V
	303 409 3426	CERAMIC	0.1U K	16V		303 397 7618	CERAMIC	1U K	25V
C321	303 453 8917	CERAMIC	0.1U K	16V		403 478 5912	CERAMIC	1U K	25V
	303 453 8610	CERAMIC	0.1U K	16V	C3509	303 453 7019	CERAMIC	33P J	50V
	303 409 3426	CERAMIC	0.1U K	16V		303 453 9617	CERAMIC	33P J	50V
C322	303 453 8917	CERAMIC	0.1U K	16V		303 276 3113	CERAMIC	33P J	50V
	303 453 8610	CERAMIC	0.1U K	16V	C351	303 453 8917	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V		303 453 8610	CERAMIC	0.1U K	16V
C323	303 453 8917	CERAMIC	0.1U K	16V		303 409 3426	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V	C3511	303 396 9613	CERAMIC	1U K	25V
	303 409 3426	CERAMIC	0.1U K	16V		303 397 7618	CERAMIC	1U K	25V
C324	303 453 8917	CERAMIC	0.1U K	16V		403 478 5912	CERAMIC	1U K	25V
	303 453 8610	CERAMIC	0.1U K	16V	C3512	303 396 9613	CERAMIC	1U K	25V
	303 409 3426	CERAMIC	0.1U K	16V		303 397 7618	CERAMIC	1U K	25V
C326	303 453 8917	CERAMIC	0.1U K	16V		403 478 5912	CERAMIC	1U K	25V
	303 453 8610	CERAMIC	0.1U K	16V	C3513	303 396 9613	CERAMIC	1U K	25V
	303 409 3426	CERAMIC	0.1U K	16V		303 397 7618	CERAMIC	1U K	25V
C327	303 453 8917	CERAMIC	0.1U K	16V		403 478 5912	CERAMIC	1U K	25V
	303 453 8610	CERAMIC	0.1U K	16V	C352	303 453 8917	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V		303 453 8610	CERAMIC	0.1U K	16V
C328	303 453 8917	CERAMIC	0.1U K	16V		303 409 3426	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V	C3520	303 453 7019	CERAMIC	33P J	50V
	303 409 3426	CERAMIC	0.1U K	16V		303 453 9617	CERAMIC	33P J	50V
C329	303 453 8917	CERAMIC	0.1U K	16V		303 276 3113	CERAMIC	33P J	50V
	303 453 8610	CERAMIC	0.1U K	16V	C3522	303 396 9613	CERAMIC	1U K	25V
	303 409 3426	CERAMIC	0.1U K	16V		303 397 7618	CERAMIC	1U K	25V
C331	303 453 8917	CERAMIC	0.1U K	16V		403 478 5912	CERAMIC	1U K	25V
	303 453 8610	CERAMIC	0.1U K	16V	C3527	303 396 9613	CERAMIC	1U K	25V
	303 409 3426	CERAMIC	0.1U K	16V		303 397 7618	CERAMIC	1U K	25V
C332	303 453 8917	CERAMIC	0.1U K	16V		403 478 5912	CERAMIC	1U K	25V
	303 453 8610	CERAMIC	0.1U K	16V	C3528	303 396 9613	CERAMIC	1U K	25V
	303 409 3426	CERAMIC	0.1U K	16V		303 397 7618	CERAMIC	1U K	25V
C333	303 453 8917	CERAMIC	0.1U K	16V		403 478 5912	CERAMIC	1U K	25V
	303 453 8610	CERAMIC	0.1U K	16V	C353	303 453 8917	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V		303 453 8610	CERAMIC	0.1U K	16V
C334	303 453 8917	CERAMIC	0.1U K	16V		303 409 3426	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V	C3531	303 396 9613	CERAMIC	1U K	25V
	303 409 3426	CERAMIC	0.1U K	16V		303 397 7618	CERAMIC	1U K	25V
C336	303 453 8917	CERAMIC	0.1U K	16V		403 478 5912	CERAMIC	1U K	25V
	303 453 8610	CERAMIC	0.1U K	16V	C3532	303 396 9613	CERAMIC	1U K	25V
	303 409 3426	CERAMIC	0.1U K	16V		303 397 7618	CERAMIC	1U K	25V
C337	303 453 8917	CERAMIC	0.1U K	16V		403 478 5912	CERAMIC	1U K	25V
	303 453 8610	CERAMIC	0.1U K	16V	C3533	303 381 5316	ELECT	100U M	16V
	303 409 3426	CERAMIC	0.1U K	16V		303 369 3211	ELECT	100U M	16V
C338	303 453 8917	CERAMIC	0.1U K	16V	C3534	303 396 9613	CERAMIC	1U K	25V
	303 453 8610	CERAMIC	0.1U K	16V		303 397 7618	CERAMIC	1U K	25V
	303 409 3426	CERAMIC	0.1U K	16V		403 478 5912	CERAMIC	1U K	25V
C339	303 453 8917	CERAMIC	0.1U K	16V	C3535	303 437 4614	CERAMIC	10U K	25V
	303 453 8610	CERAMIC	0.1U K	16V	C3539	303 453 7019	CERAMIC	33P J	50V
	303 409 3426	CERAMIC	0.1U K	16V		303 453 9617	CERAMIC	33P J	50V

Electrical Parts List

Key No.	Part No.	Description		
	303 276 3113	CERAMIC	33P J	50V
C354	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C3550	303 453 7019	CERAMIC	33P J	50V
	303 453 9617	CERAMIC	33P J	50V
	303 276 3113	CERAMIC	33P J	50V
C3552	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
	403 478 5912	CERAMIC	1U K	25V
C356	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C3561	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
	403 478 5912	CERAMIC	1U K	25V
C3566	303 453 7019	CERAMIC	33P J	50V
	303 453 9617	CERAMIC	33P J	50V
	303 276 3113	CERAMIC	33P J	50V
C357	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C3577	303 453 7019	CERAMIC	33P J	50V
	303 453 9617	CERAMIC	33P J	50V
	303 276 3113	CERAMIC	33P J	50V
C3579	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
	403 478 5912	CERAMIC	1U K	25V
C358	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C3580	303 381 5316	ELECT	100U M	16V
	303 369 3211	ELECT	100U M	16V
C3582	303 437 4614	CERAMIC	10U K	25V
C3583	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
	403 478 5912	CERAMIC	1U K	25V
C3584	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
	403 478 5912	CERAMIC	1U K	25V
C3588	303 394 5815	CERAMIC	4.7U K	16V
	303 441 5515	CERAMIC	4.7U K	16V
C361	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C362	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C363	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C364	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C365	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C366	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C367	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C368	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C369	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C370	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C371	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C372	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C373	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C376	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C377	303 358 3215	CERAMIC	10U K	6.3V
	303 370 0018	CERAMIC	10U K	6.3V
	303 368 7319	CERAMIC	10U K	6.3V
C378	303 358 3215	CERAMIC	10U K	6.3V
	303 368 7319	CERAMIC	10U K	6.3V
C379	303 358 3215	CERAMIC	10U K	6.3V
	303 368 7319	CERAMIC	10U K	6.3V
C3801	303 433 1112	CERAMIC	1U K	10V
C3802	303 433 1112	CERAMIC	1U K	10V
C3803	303 433 1112	CERAMIC	1U K	10V
C3804	303 433 1112	CERAMIC	1U K	10V
C3806	403 455 1012	CERAMIC	1U K	10V
	303 433 1112	CERAMIC	1U K	10V
C381	303 454 0415	CERAMIC	0.068U K	16V
	303 442 0519	CERAMIC	0.068U K	16V
C382	303 454 0415	CERAMIC	0.068U K	16V
	303 442 0519	CERAMIC	0.068U K	16V
C383	303 454 0613	CERAMIC	0.01U K	50V
	303 441 9810	CERAMIC	0.01U K	50V
C384	303 454 0415	CERAMIC	0.068U K	16V
	303 442 0519	CERAMIC	0.068U K	16V
C387	403 455 1012	CERAMIC	1U K	10V
	303 433 1112	CERAMIC	1U K	10V
C388	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C390	403 457 2512	CERAMIC	0.47U K	10V
	303 376 6311	CERAMIC	0.47U K	10V
C4001	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C4002	303 372 7510	CERAMIC	2.2U K	6.3V
	303 370 0216	CERAMIC	2.2U K	6.3V
C4003	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C4004	303 372 7510	CERAMIC	2.2U K	6.3V
	303 370 0216	CERAMIC	2.2U K	6.3V
C401	303 453 8719	CERAMIC	470P K	50V
	303 453 9211	CERAMIC	470P K	50V
	303 282 5118	CERAMIC	470P K	50V
C402	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C403	303 453 8719	CERAMIC	470P K	50V
	303 453 9211	CERAMIC	470P K	50V
	303 282 5118	CERAMIC	470P K	50V
C404	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V

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Key No.	Part No.	Description		
C406	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C407	303 453 8719	CERAMIC	470P K	50V
	303 453 9211	CERAMIC	470P K	50V
	303 282 5118	CERAMIC	470P K	50V
C411	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C412	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C413	303 453 8719	CERAMIC	470P K	50V
	303 453 9211	CERAMIC	470P K	50V
	303 282 5118	CERAMIC	470P K	50V
C414	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C416	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C417	303 372 7510	CERAMIC	2.2U K	6.3V
	303 370 0216	CERAMIC	2.2U K	6.3V
C421	303 453 8719	CERAMIC	470P K	50V
	303 453 9211	CERAMIC	470P K	50V
	303 282 5118	CERAMIC	470P K	50V
C422	403 455 1012	CERAMIC	1U K	10V
	303 433 1112	CERAMIC	1U K	10V
C423	303 453 8719	CERAMIC	470P K	50V
	303 453 9211	CERAMIC	470P K	50V
	303 282 5118	CERAMIC	470P K	50V
C424	403 455 1012	CERAMIC	1U K	10V
	303 433 1112	CERAMIC	1U K	10V
C426	403 455 1012	CERAMIC	1U K	10V
	303 433 1112	CERAMIC	1U K	10V
C427	303 453 8719	CERAMIC	470P K	50V
	303 453 9211	CERAMIC	470P K	50V
	303 282 5118	CERAMIC	470P K	50V
C428	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C431	303 453 8719	CERAMIC	470P K	50V
	303 453 9211	CERAMIC	470P K	50V
	303 282 5118	CERAMIC	470P K	50V
C432	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C433	303 453 8719	CERAMIC	470P K	50V
	303 453 9211	CERAMIC	470P K	50V
	303 282 5118	CERAMIC	470P K	50V
C434	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C436	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C437	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C438	303 454 0613	CERAMIC	0.01U K	50V
	303 441 9810	CERAMIC	0.01U K	50V
C439	403 455 1012	CERAMIC	1U K	10V
	303 433 1112	CERAMIC	1U K	10V
C441	403 455 1616	CERAMIC	10U K	16V
	403 478 5813	CERAMIC	10U K	16V
C442	403 455 1012	CERAMIC	1U K	10V
	303 433 1112	CERAMIC	1U K	10V
C443	303 372 7510	CERAMIC	2.2U K	6.3V
	303 370 0216	CERAMIC	2.2U K	6.3V
C480	303 358 3215	CERAMIC	10U K	6.3V
	303 370 0018	CERAMIC	10U K	6.3V
	303 368 7319	CERAMIC	10U K	6.3V
C4808	303 358 3215	CERAMIC	10U K	6.3V
	303 370 0018	CERAMIC	10U K	6.3V
	303 368 7319	CERAMIC	10U K	6.3V
C481	303 358 3215	CERAMIC	10U K	6.3V
	303 370 0018	CERAMIC	10U K	6.3V
	303 368 7319	CERAMIC	10U K	6.3V
C482	303 358 3215	CERAMIC	10U K	6.3V
	303 370 0018	CERAMIC	10U K	6.3V
	303 368 7319	CERAMIC	10U K	6.3V
C483	303 358 3215	CERAMIC	10U K	6.3V
	303 370 0018	CERAMIC	10U K	6.3V
	303 368 7319	CERAMIC	10U K	6.3V
C4891	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C5001	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
	403 478 5912	CERAMIC	1U K	25V
C5002	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
	403 478 5912	CERAMIC	1U K	25V
C5004	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
C5005	303 392 1215	ELECT	47U M	6.3V
	303 387 5310	ELECT	47U M	6.3V
C5006	303 437 4614	CERAMIC	10U K	25V
C5007	403 467 0911	CERAMIC	0.1U K	25V
C5008	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C5009	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
	403 478 5912	CERAMIC	1U K	25V
C501	303 298 9612	CERAMIC	0.1U K	16V
C5011	303 394 5815	CERAMIC	4.7U K	16V
C5012	303 394 5815	CERAMIC	4.7U K	16V
C5013	303 394 5815	CERAMIC	4.7U K	16V
C5014	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
	403 478 5912	CERAMIC	1U K	25V
C502	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C5024	403 455 1616	CERAMIC	10U K	16V
	403 478 5813	CERAMIC	10U K	16V
C5025	403 455 1616	CERAMIC	10U K	16V
	403 478 5813	CERAMIC	10U K	16V
C5026	403 455 1616	CERAMIC	10U K	16V
	403 478 5813	CERAMIC	10U K	16V
C5027	403 455 1616	CERAMIC	10U K	16V
	403 478 5813	CERAMIC	10U K	16V
C5028	403 455 1616	CERAMIC	10U K	16V
	403 478 5813	CERAMIC	10U K	16V
C503	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C5031	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
C5032	303 336 3510	CERAMIC	0.47U K	16V
C5033	403 455 1012	CERAMIC	1U K	10V
	303 433 1112	CERAMIC	1U K	10V
C5037	403 455 1012	CERAMIC	1U K	10V

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Key No.	Part No.	Description		
	303 433 1112	CERAMIC	1U K	10V
C5038	303 454 0613	CERAMIC	0.01U K	50V
	303 441 9810	CERAMIC	0.01U K	50V
C5039	303 454 0613	CERAMIC	0.01U K	50V
	303 441 9810	CERAMIC	0.01U K	50V
C504	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C5041	303 454 0613	CERAMIC	0.01U K	50V
	303 441 9810	CERAMIC	0.01U K	50V
C506	303 298 9612	CERAMIC	0.1U K	16V
C5061	403 455 1616	CERAMIC	10U K	16V
	403 478 5813	CERAMIC	10U K	16V
C5069	403 455 1616	CERAMIC	10U K	16V
	403 478 5813	CERAMIC	10U K	16V
C507	303 358 3215	CERAMIC	10U K	6.3V
	303 370 0018	CERAMIC	10U K	6.3V
	303 368 7319	CERAMIC	10U K	6.3V
C508	303 401 4312	ELECT	47U M	25V
	303 419 5219	ELECT	47.0UM	25V
C5081	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C5082	303 398 3312	ELECT	47U M	10V
	303 387 6119	ELECT	47U M	10V
C5083	303 398 3312	ELECT	47U M	10V
	303 387 6119	ELECT	47U M	10V
C5084	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C5085	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C5087	303 381 5613	ELECT	220U M	16V
	303 423 8916	ELECT	220U M	16V
C509	303 372 7510	CERAMIC	2.2U K	6.3V
C511	303 397 8219	CERAMIC	2.2U K	25V
C512	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
	403 478 5912	CERAMIC	1U K	25V
C513	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
	403 478 5912	CERAMIC	1U K	25V
C514	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
	403 478 5912	CERAMIC	1U K	25V
C516	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
	403 478 5912	CERAMIC	1U K	25V
C517	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
	403 478 5912	CERAMIC	1U K	25V
C518	303 342 3313	CERAMIC	0.1U K	25V
C519	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
	403 478 5912	CERAMIC	1U K	25V
C521	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
	403 478 5912	CERAMIC	1U K	25V
C523	303 342 3313	CERAMIC	0.1U K	25V
C524	303 342 3313	CERAMIC	0.1U K	25V
C527	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
	403 478 5912	CERAMIC	1U K	25V
C528	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
	403 478 5912	CERAMIC	1U K	25V
C5304	303 454 0415	CERAMIC	0.068U K	16V
	303 442 0519	CERAMIC	0.068U K	16V
C531	303 298 9612	CERAMIC	0.1U K	16V
C5316	303 454 0415	CERAMIC	0.068U K	16V
	303 442 0519	CERAMIC	0.068U K	16V
C5317	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C532	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C533	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C5333	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C5334	303 453 6814	CERAMIC	68P J	50V
	303 454 0019	CERAMIC	68P J	50V
	303 320 0419	CERAMIC	68P J	50V
C5336	403 456 4616	CERAMIC	27P J	50V
	303 309 2519	CERAMIC	27P J	50V
C5337	303 453 6319	CERAMIC	100P J	50V
	303 454 0910	CERAMIC	100P J	50V
	303 294 6110	CERAMIC	100P J	50V
C534	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C536	303 298 9612	CERAMIC	0.1U K	16V
C537	303 358 3215	CERAMIC	10U K	6.3V
	303 370 0018	CERAMIC	10U K	6.3V
	303 368 7319	CERAMIC	10U K	6.3V
C538	303 401 4312	ELECT	47U M	25V
	303 419 5219	ELECT	47.0UM	25V
C539	303 372 7510	CERAMIC	2.2U K	6.3V
C541	303 397 8219	CERAMIC	2.2U K	25V
C542	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
	403 478 5912	CERAMIC	1U K	25V
C543	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
	403 478 5912	CERAMIC	1U K	25V
C544	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
	403 478 5912	CERAMIC	1U K	25V
C546	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
	403 478 5912	CERAMIC	1U K	25V
C547	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
	403 478 5912	CERAMIC	1U K	25V
C548	303 342 3313	CERAMIC	0.1U K	25V
C549	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
	403 478 5912	CERAMIC	1U K	25V
C551	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
	403 478 5912	CERAMIC	1U K	25V
C553	303 342 3313	CERAMIC	0.1U K	25V
C554	303 342 3313	CERAMIC	0.1U K	25V
C557	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
	403 478 5912	CERAMIC	1U K	25V
C558	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
	403 478 5912	CERAMIC	1U K	25V
C5601	303 398 3312	ELECT	47U M	10V

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Key No.	Part No.	Description		
	303 387 6119	ELECT	47U M	10V
C5602	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C5603	303 392 1215	ELECT	47U M	6.3V
	303 387 5310	ELECT	47U M	6.3
C5604	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C5605	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C5606	303 401 4312	ELECT	47U M	25V
	303 419 5219	ELECT	47.0UM	25V
C5608	303 381 5316	ELECT	100U M	16V
	303 369 3211	ELECT	100U M	16V
C5609	303 401 4312	ELECT	47U M	25V
	303 419 5219	ELECT	47.0UM	25V
C561	303 298 9612	CERAMIC	0.1U K	16V
C5611	303 401 4312	ELECT	47U M	25V
	303 419 5219	ELECT	47.0UM	25V
C562	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C5621	303 383 5215	CERAMIC	4.7U K	6.3V
	303 393 2112	CERAMIC	4.7U K	6.3V
C5623	303 383 5215	CERAMIC	4.7U K	6.3V
	303 393 2112	CERAMIC	4.7U K	6.3V
C563	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C564	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C5644	403 455 1616	CERAMIC	10U K	16V
	403 478 5813	CERAMIC	10U K	16V
C566	303 298 9612	CERAMIC	0.1U K	16V
C567	303 358 3215	CERAMIC	10U K	6.3V
	303 370 0018	CERAMIC	10U K	6.3V
	303 368 7319	CERAMIC	10U K	6.3V
C568	303 401 4312	ELECT	47U M	25V
	303 419 5219	ELECT	47.0UM	25V
C569	303 372 7510	CERAMIC	2.2U K	6.3V
C571	303 397 8219	CERAMIC	2.2U K	25V
C572	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
	403 478 5912	CERAMIC	1U K	25V
C573	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
	403 478 5912	CERAMIC	1U K	25V
C574	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
	403 478 5912	CERAMIC	1U K	25V
C5752	303 382 7814	CERAMIC	2.2U K	10V
C576	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
	403 478 5912	CERAMIC	1U K	25V
C577	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
	403 478 5912	CERAMIC	1U K	25V
C578	303 342 3313	CERAMIC	0.1U K	25V
C579	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
	403 478 5912	CERAMIC	1U K	25V
C581	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
	403 478 5912	CERAMIC	1U K	25V

Key No.	Part No.	Description		
C5821	304 104 6204	CERAMIC	0.033U K	50V
	304 091 4009	CERAMIC	0.033U K	50V
C5822	303 157 7018	CERAMIC	1800P K	50V
C5823	303 454 0613	CERAMIC	0.01U K	50V
	303 441 9810	CERAMIC	0.01U K	50V
C5824	403 455 1616	CERAMIC	10U K	16V
	403 478 5813	CERAMIC	10U K	16V
C5825	303 381 5316	ELECT	100U M	16V
	303 369 3211	ELECT	100U M	16V
C5826	303 454 0613	CERAMIC	0.01U K	50V
	303 441 9810	CERAMIC	0.01U K	50V
C5827	303 392 5015	CERAMIC	22U M	6.3V
	303 443 9214	CERAMIC	22U M	6.3V
C5828	403 462 2910	EP-ELECT	330U M	4V
C583	303 342 3313	CERAMIC	0.1U K	25V
C584	303 342 3313	CERAMIC	0.1U K	25V
C5843	303 358 3215	CERAMIC	10U K	6.3V
	303 370 0018	CERAMIC	10U K	6.3V
	303 368 7319	CERAMIC	10U K	6.3V
C5845	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C5861	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C5862	303 279 5114	CERAMIC	3300P K	50V
C5863	303 454 0613	CERAMIC	0.01U K	50V
	303 441 9810	CERAMIC	0.01U K	50V
C5864	403 455 1616	CERAMIC	10U K	16V
	403 478 5813	CERAMIC	10U K	16V
C5865	303 381 5316	ELECT	100U M	16V
	303 369 3211	ELECT	100U M	16V
C5866	303 454 0613	CERAMIC	0.01U K	50V
	303 441 9810	CERAMIC	0.01U K	50V
C5867	303 392 5015	CERAMIC	22U M	6.3V
	303 443 9214	CERAMIC	22U M	6.3V
C5868	403 462 2910	EP-ELECT	330U M	4V
C587	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
	403 478 5912	CERAMIC	1U K	25V
C588	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
	403 478 5912	CERAMIC	1U K	25V
C591	303 376 3112	ELECT	100U M	25V
	303 374 7815	ELECT	100UM	25V
C592	303 376 3112	ELECT	100U M	25V
	303 374 7815	ELECT	100UM	25V
C593	303 396 9613	CERAMIC	1U K	25V
	303 397 7618	CERAMIC	1U K	25V
	403 478 5912	CERAMIC	1U K	25V
C6801	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C6802	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C6803	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C6804	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C7811	303 397 8219	CERAMIC	2.2U K	25V
C7812	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C7813	303 381 5316	ELECT	100U M	16V

Electrical Parts List

Key No.	Part No.	Description		
	303 369 3211	ELECT	100U M	16V
C7814	303 381 5316	ELECT	100U M	16V
	303 369 3211	ELECT	100U M	16V
C7817	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C7818	303 454 1917	CERAMIC	4700P K	50V
	303 379 7315	CERAMIC	4700P K	50V
C7863	303 381 5316	ELECT	100U M	16V
	303 369 3211	ELECT	100U M	16V
C7864	303 381 5316	ELECT	100U M	16V
	303 369 3211	ELECT	100U M	16V
C7868	303 454 1917	CERAMIC	4700P K	50V
	303 379 7315	CERAMIC	4700P K	50V
C801	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C8801	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C8802	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C8803	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C8806	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C8807	303 453 7019	CERAMIC	33P J	50V
	303 453 9617	CERAMIC	33P J	50V
	303 276 3113	CERAMIC	33P J	50V
C8808	303 453 7019	CERAMIC	33P J	50V
	303 453 9617	CERAMIC	33P J	50V
	303 276 3113	CERAMIC	33P J	50V
C8809	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C8810	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C8811	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C8812	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C8813	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C8814	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C8815	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C8817	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C8818	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C8819	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C8820	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C8821	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C8823	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C8832	303 454 0613	CERAMIC	0.01U K	50V
	303 441 9810	CERAMIC	0.01U K	50V
C8833	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C9882	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C9885	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C9981	303 453 8917	CERAMIC	0.1U K	16V
	303 453 8610	CERAMIC	0.1U K	16V
	303 409 3426	CERAMIC	0.1U K	16V
C9983	303 409 3426	CERAMIC	0.1U K	16V
RESISTOR				
R1001	301 260 4115	MT-GLAZE	75 JA	1/3W
R1002	301 224 8814	MT-GLAZE	100 JA	1/16W
R1003	301 225 8110	MT-GLAZE	10 JA	1/16W
R1004	301 225 0312	MT-GLAZE	33 JA	1/16W
R1005	301 225 1814	MT-GLAZE	47 JA	1/16W
R1006	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R1011	301 260 4115	MT-GLAZE	75 JA	1/3W
R1012	301 224 8814	MT-GLAZE	100 JA	1/16W
R1013	301 037 5017	MT-GLAZE	0.000 ZA	1/10W
R1014	301 037 5017	MT-GLAZE	0.000 ZA	1/10W
R1015	301 037 5017	MT-GLAZE	0.000 ZA	1/10W
R1016	301 037 5017	MT-GLAZE	0.000 ZA	1/10W
R1021	301 260 4115	MT-GLAZE	75 JA	1/3W
R1022	301 224 8814	MT-GLAZE	100 JA	1/16W
R1031	301 225 1418	MT-GLAZE	47K JA	1/16W
R1033	301 225 8110	MT-GLAZE	10 JA	1/16W
R1034	301 225 8110	MT-GLAZE	10 JA	1/16W
R1036	301 225 8110	MT-GLAZE	10 JA	1/16W
R1037	301 225 8110	MT-GLAZE	10 JA	1/16W
R1038	301 224 8814	MT-GLAZE	100 JA	1/16W
R1039	301 225 8110	MT-GLAZE	10 JA	1/16W
R1040	301 224 9316	MT-GLAZE	1K JA	1/16W
R1041	301 225 1418	MT-GLAZE	47K JA	1/16W
R1048	301 224 8814	MT-GLAZE	100 JA	1/16W
R1050	301 224 9316	MT-GLAZE	1K JA	1/16W
R1051	301 037 2818	MT-GLAZE	75 JA	1/8W
R1052	301 263 7420	MT-GLAZE	75 JA	1/16W
R1053	301 225 2019	MT-GLAZE	680 JA	1/16W
R1054	301 299 5312	MT-GLAZE	12K FA	1/16W
R1056	301 225 1210	MT-GLAZE	4.7K JA	1/16W
R1057	301 225 1210	MT-GLAZE	4.7K JA	1/16W
R1058	301 224 9316	MT-GLAZE	1K JA	1/16W
R1060	301 224 9316	MT-GLAZE	1K JA	1/16W
R1061	301 037 2818	MT-GLAZE	75 JA	1/8W
R1062	301 263 7420	MT-GLAZE	75 JA	1/16W
R1063	301 225 2019	MT-GLAZE	680 JA	1/16W
R1064	301 299 5312	MT-GLAZE	12K FA	1/16W
R1065	301 224 9316	MT-GLAZE	1K JA	1/16W
R1067	301 224 9019	MT-GLAZE	10K JA	1/16W
R1068	301 224 9019	MT-GLAZE	10K JA	1/16W
R1069	301 224 9316	MT-GLAZE	1K JA	1/16W
R1071	301 037 2818	MT-GLAZE	75 JA	1/8W
R1072	301 263 7420	MT-GLAZE	75 JA	1/16W

Electrical Parts List

Key No.	Part No.	Description			Key No.	Part No.	Description		
R1073	301 225 2019	MT-GLAZE	680 JA	1/16W	R2015	301 225 8011	MT-GLAZE	330 JA	1/16W
R1074	301 299 5312	MT-GLAZE	12K FA	1/16W	R2016	301 263 2316	MT-GLAZE	750 JA	1/16W
R1076	301 225 8110	MT-GLAZE	10 JA	1/16W	R2017	301 224 8814	MT-GLAZE	100 JA	1/16W
R1078	301 225 8110	MT-GLAZE	10 JA	1/16W	R2021	301 224 8814	MT-GLAZE	100 JA	1/16W
R1080	301 225 8110	MT-GLAZE	10 JA	1/16W	R2022	301 260 4115	MT-GLAZE	75 JA	1/3W
R1081	301 225 1418	MT-GLAZE	47K JA	1/16W	R2025	301 225 8011	MT-GLAZE	330 JA	1/16W
R1083	301 225 8110	MT-GLAZE	10 JA	1/16W	R2026	301 263 2316	MT-GLAZE	750 JA	1/16W
R1084	301 224 9316	MT-GLAZE	1K JA	1/16W	R2027	301 224 8814	MT-GLAZE	100 JA	1/16W
R1088	301 224 9316	MT-GLAZE	1K JA	1/16W	R2032	301 224 9019	MT-GLAZE	10K JA	1/16W
R1091	301 225 1418	MT-GLAZE	47K JA	1/16W	R2033	301 260 4115	MT-GLAZE	75 JA	1/3W
R1093	301 226 1516	MT-GLAZE	0.000 ZA	1/16W	R2034	301 224 8814	MT-GLAZE	100 JA	1/16W
R1301	301 226 1516	MT-GLAZE	0.000 ZA	1/16W	R2036	301 263 2316	MT-GLAZE	750 JA	1/16W
R1306	301 224 9316	MT-GLAZE	1K JA	1/16W	R2037	301 225 8011	MT-GLAZE	330 JA	1/16W
R1351	301 224 9019	MT-GLAZE	10K JA	1/16W	R2043	301 224 8814	MT-GLAZE	100 JA	1/16W
R1352	301 224 9019	MT-GLAZE	10K JA	1/16W	R2053	301 224 8814	MT-GLAZE	100 JA	1/16W
R1353	301 225 0213	MT-GLAZE	3.3K JA	1/16W	R2890	301 224 9712	MT-GLAZE	22 JA	1/16W
R1354	301 225 0213	MT-GLAZE	3.3K JA	1/16W	R2891	301 224 9712	MT-GLAZE	22 JA	1/16W
R1391	301 226 1516	MT-GLAZE	0.000 ZA	1/16W	R2892	301 224 8814	MT-GLAZE	100 JA	1/16W
R1392	301 226 1516	MT-GLAZE	0.000 ZA	1/16W	R3002	301 224 8814	MT-GLAZE	100 JA	1/16W
R1393	301 225 0213	MT-GLAZE	3.3K JA	1/16W	R301	301 224 9316	MT-GLAZE	1K JA	1/16W
R1394	301 225 0213	MT-GLAZE	3.3K JA	1/16W	R3012	301 224 8814	MT-GLAZE	100 JA	1/16W
R1427	301 224 8814	MT-GLAZE	100 JA	1/16W	R302	301 224 9316	MT-GLAZE	1K JA	1/16W
R1428	301 224 8814	MT-GLAZE	100 JA	1/16W	R303	301 224 9316	MT-GLAZE	1K JA	1/16W
R1429	301 294 3313	MT-GLAZE	15K FA	1/16W	R304	301 224 9316	MT-GLAZE	1K JA	1/16W
R1431	301 294 3313	MT-GLAZE	15K FA	1/16W	R3051	301 224 8913	MT-GLAZE	100K JA	1/16W
R1432	301 294 3313	MT-GLAZE	15K FA	1/16W	R3052	301 224 8814	MT-GLAZE	100 JA	1/16W
R1433	301 294 3313	MT-GLAZE	15K FA	1/16W	R3053	301 224 8913	MT-GLAZE	100K JA	1/16W
R1434	301 256 1517	MT-GLAZE	13K JA	1/10W	R3054	301 224 8913	MT-GLAZE	100K JA	1/16W
R1435	301 224 9316	MT-GLAZE	1K JA	1/16W	R3056	301 224 9415	MT-GLAZE	1M JA	1/16W
R1436	301 225 0114	MT-GLAZE	27K JA	1/16W	R3057	301 224 9910	MT-GLAZE	22K JA	1/16W
R1437	301 225 1210	MT-GLAZE	4.7K JA	1/16W	R306	301 224 9712	MT-GLAZE	22 JA	1/16W
R1438	301 294 3313	MT-GLAZE	15K FA	1/16W	R3061	301 224 8913	MT-GLAZE	100K JA	1/16W
R1439	301 225 1210	MT-GLAZE	4.7K JA	1/16W	R3062	301 224 8814	MT-GLAZE	100 JA	1/16W
R1441	301 294 3313	MT-GLAZE	15K FA	1/16W	R307	301 224 9712	MT-GLAZE	22 JA	1/16W
R1442	301 294 3313	MT-GLAZE	15K FA	1/16W	R308	301 339 9515	MT-GLAZE	12.1K FA	1/10W
R1443	301 225 1210	MT-GLAZE	4.7K JA	1/16W	R311	301 224 9019	MT-GLAZE	10K JA	1/16W
R1444	301 235 0012	MT-GLAZE	7.5K JA	1/16W	R312	301 224 9019	MT-GLAZE	10K JA	1/16W
R1446	301 235 0012	MT-GLAZE	7.5K JA	1/16W	R314	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R1447	301 224 9514	MT-GLAZE	2.2K JA	1/16W	R321	301 225 0213	MT-GLAZE	3.3K JA	1/16W
R1448	301 224 9019	MT-GLAZE	10K JA	1/16W	R322	301 225 0213	MT-GLAZE	3.3K JA	1/16W
R1449	301 224 8814	MT-GLAZE	100 JA	1/16W	R324	301 256 3610	MT-GLAZE	15K JA	1/10W
R1458	301 226 1516	MT-GLAZE	0.000 ZA	1/16W	R325	301 150 5918	MT-GLAZE	10K JA	1/10W
R1459	301 226 1516	MT-GLAZE	0.000 ZA	1/16W	R326	301 256 6611	MT-GLAZE	68K JA	1/10W
R1907	301 224 9316	MT-GLAZE	1K JA	1/16W	R327	301 150 5918	MT-GLAZE	10K JA	1/10W
R1908	301 224 9316	MT-GLAZE	1K JA	1/16W	R328	301 256 6611	MT-GLAZE	68K JA	1/10W
R1909	301 224 9316	MT-GLAZE	1K JA	1/16W	R329	301 150 5918	MT-GLAZE	10K JA	1/10W
R1911	303 376 6212	CERAMIC	0.22U K	10V	R334	301 225 8110	MT-GLAZE	10 JA	1/16W
R1913	303 376 6212	CERAMIC	0.22U K	10V	R340	301 224 8814	MT-GLAZE	100 JA	1/16W
R1922	303 453 8917	CERAMIC	0.1U K	16V	R347	301 224 8814	MT-GLAZE	100 JA	1/16W
	303 453 8610	CERAMIC	0.1U K	16V	R348	301 225 0213	MT-GLAZE	3.3K JA	1/16W
	303 409 3426	CERAMIC	0.1U K	16V	R350	301 263 7420	MT-GLAZE	75 JA	1/16W
R1924	303 376 6212	CERAMIC	0.22U K	10V	R3502	301 225 1418	MT-GLAZE	47K JA	1/16W
R1925	303 376 6212	CERAMIC	0.22U K	10V	R352	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R1926	303 376 6212	CERAMIC	0.22U K	10V	R353	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R1930	301 226 1516	MT-GLAZE	0.000 ZA	1/16W	R3532	301 225 1418	MT-GLAZE	47K JA	1/16W
R1931	301 226 1516	MT-GLAZE	0.000 ZA	1/16W	R356	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R1932	301 226 1516	MT-GLAZE	0.000 ZA	1/16W	R3562	301 225 1418	MT-GLAZE	47K JA	1/16W
R1939	301 226 1516	MT-GLAZE	0.000 ZA	1/16W	R3580	301 037 5017	MT-GLAZE	0.000 ZA	1/10W
R1943	301 226 1516	MT-GLAZE	0.000 ZA	1/16W	R3585	301 224 9019	MT-GLAZE	10K JA	1/16W
R1944	301 226 1516	MT-GLAZE	0.000 ZA	1/16W	R3586	301 224 9316	MT-GLAZE	1K JA	1/16W
R2002	301 224 8814	MT-GLAZE	100 JA	1/16W	R3587	301 224 9019	MT-GLAZE	10K JA	1/16W
R2005	301 037 5017	MT-GLAZE	0.000 ZA	1/10W	R3588	301 225 1210	MT-GLAZE	4.7K JA	1/16W
R2006	301 037 5116	MT-GLAZE	10 JA	1/10W	R3601	301 225 0213	MT-GLAZE	3.3K JA	1/16W
R2007	301 224 8814	MT-GLAZE	100 JA	1/16W	R3602	301 224 9019	MT-GLAZE	10K JA	1/16W
R2009	301 037 5116	MT-GLAZE	10 JA	1/10W	R3603	301 224 9019	MT-GLAZE	10K JA	1/16W
R2011	301 224 8814	MT-GLAZE	100 JA	1/16W	R361	301 339 9614	MT-GLAZE	23.2K FA	1/10W
R2012	301 260 4115	MT-GLAZE	75 JA	1/3W	R362	301 302 3410	MT-GLAZE	13K JA	1/16W

Electrical Parts List

Key No.	Part No.	Description			Key No.	Part No.	Description		
R3621	301 224 9019	MT-GLAZE	10K JA	1/16W	R5036	301 225 0213	MT-GLAZE	3.3K JA	1/16W
R3622	301 224 9019	MT-GLAZE	10K JA	1/16W	R5037	301 224 9316	MT-GLAZE	1K JA	1/16W
R3623	301 224 9019	MT-GLAZE	10K JA	1/16W	R5039	301 229 7218	MT-GLAZE	18K JA	1/16W
R3624	301 224 9019	MT-GLAZE	10K JA	1/16W	R5040	301 224 9019	MT-GLAZE	10K JA	1/16W
R3626	301 224 9019	MT-GLAZE	10K JA	1/16W	R5041	301 224 9316	MT-GLAZE	1K JA	1/16W
R3627	301 224 9019	MT-GLAZE	10K JA	1/16W	R5042	301 224 9316	MT-GLAZE	1K JA	1/16
R371	301 225 8110	MT-GLAZE	10 JA	1/16W	R5044	301 224 9019	MT-GLAZE	10K JA	1/16W
R372	301 224 9415	MT-GLAZE	1M JA	1/16W	R5046	301 224 9019	MT-GLAZE	10K JA	1/16W
R373	301 225 8110	MT-GLAZE	10 JA	1/16W	R5047	301 224 9613	MT-GLAZE	2.7K JA	1/16W
R374	301 225 8110	MT-GLAZE	10 JA	1/16W	R5048	301 224 9316	MT-GLAZE	1K JA	1/16W
R375	301 225 8110	MT-GLAZE	10 JA	1/16W	R5051	301 224 9019	MT-GLAZE	10K JA	1/16W
R376	301 225 8110	MT-GLAZE	10 JA	1/16W	R5052	301 224 9910	MT-GLAZE	22K JA	1/16W
R377	301 225 8110	MT-GLAZE	10 JA	1/16W	R5053	301 224 9910	MT-GLAZE	22K JA	1/16W
R378	301 225 8110	MT-GLAZE	10 JA	1/16W	R5061	301 224 9316	MT-GLAZE	1K JA	1/16W
R3801	301 225 8110	MT-GLAZE	10 JA	1/16W	R5062	301 225 0213	MT-GLAZE	3.3K JA	1/16W
R3802	301 225 0213	MT-GLAZE	3.3K JA	1/16W	R5063	301 224 9316	MT-GLAZE	1K JA	1/16W
R3803	301 225 8110	MT-GLAZE	10 JA	1/16W	R5064	301 224 9316	MT-GLAZE	1K JA	1/16W
R3804	301 225 8516	MT-GLAZE	1.8K JA	1/16W	R5066	301 225 0213	MT-GLAZE	3.3K JA	1/16W
R3805	301 224 9019	MT-GLAZE	10K JA	1/16W	R5067	301 224 9316	MT-GLAZE	1K JA	1/16W
R3806	301 225 8110	MT-GLAZE	10 JA	1/16W	R5069	301 225 8011	MT-GLAZE	330 JA	1/16W
R381	301 263 7420	MT-GLAZE	75 JA	1/16W	R507	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R391	301 224 9316	MT-GLAZE	1K JA	1/16W	R508	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R392	301 224 9019	MT-GLAZE	10K JA	1/16W	R5082	301 224 9316	MT-GLAZE	1K JA	1/16W
R4001	301 224 8814	MT-GLAZE	100 JA	1/16W	R5084	301 150 6014	MT-GLAZE	0.000 ZA	1/10W
R401	301 224 8814	MT-GLAZE	100 JA	1/16W	R5085	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R4014	301 225 1210	MT-GLAZE	4.7K JA	1/16W	R511	301 224 8814	MT-GLAZE	100 JA	1/16W
R4016	301 224 9514	MT-GLAZE	2.2K JA	1/16W	R512	301 224 8814	MT-GLAZE	100 JA	1/16W
R4017	301 224 9514	MT-GLAZE	2.2K JA	1/16W	R516	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R402	301 224 8814	MT-GLAZE	100 JA	1/16W	R5213	301 224 8814	MT-GLAZE	100 JA	1/16W
R4023	301 224 9019	MT-GLAZE	10K JA	1/16W	R5214	301 224 8814	MT-GLAZE	100 JA	1/16W
R4024	301 225 1210	MT-GLAZE	4.7K JA	1/16W	R5215	301 224 8814	MT-GLAZE	100 JA	1/16W
R403	301 224 8814	MT-GLAZE	100 JA	1/16W	R5216	301 224 8814	MT-GLAZE	100 JA	1/16W
R405	301 224 8814	MT-GLAZE	100 JA	1/16W	R531	301 224 8814	MT-GLAZE	100 JA	1/16W
R406	301 226 1516	MT-GLAZE	0.000 ZA	1/16W	R5317	301 225 1814	MT-GLAZE	47 JA	1/16W
R407	301 226 1516	MT-GLAZE	0.000 ZA	1/16W	R5318	301 225 3818	MT-GLAZE	1.5K JA	1/16W
R4072	301 224 8814	MT-GLAZE	100 JA	1/16W	R5338	301 226 2414	MT-GLAZE	560 JA	1/16W
R4077	301 224 8814	MT-GLAZE	100 JA	1/16W	R537	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R408	301 226 1516	MT-GLAZE	0.000 ZA	1/16W	R538	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R410	301 226 1516	MT-GLAZE	0.000 ZA	1/16W	R541	301 224 8814	MT-GLAZE	100 JA	1/16W
R412	301 225 1814	MT-GLAZE	47 JA	1/16W	R542	301 224 8814	MT-GLAZE	100 JA	1/16W
R414	301 225 1814	MT-GLAZE	47 JA	1/16W	R546	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R416	301 225 1814	MT-GLAZE	47 JA	1/16W	R5601	301 224 9316	MT-GLAZE	1K JA	1/16W
R418	301 225 1814	MT-GLAZE	47 JA	1/16W	R5603	307 210 5416	DIODE RB551V-30-TE-17		
R419	301 225 1814	MT-GLAZE	47 JA	1/16W	R561	301 224 8814	MT-GLAZE	100 JA	1/16W
R422	301 225 1814	MT-GLAZE	47 JA	1/16W	R5611	301 224 8814	MT-GLAZE	100 JA	1/16W
R423	301 225 1814	MT-GLAZE	47 JA	1/16W	R5612	301 150 6014	MT-GLAZE	0.000 ZA	1/10W
R424	301 225 1210	MT-GLAZE	4.7K JA	1/16W	R5622	301 218 8615	MT-GLAZE	5.6 JA	1W
R425	301 150 6014	MT-GLAZE	0.000 ZA	1/10W	R5623	301 190 1710	MT-GLAZE	0.000 ZA	1W
R426	301 224 9019	MT-GLAZE	10K JA	1/16W	R5624	301 037 5017	MT-GLAZE	0.000 ZA	1/10W
R427	301 226 1516	MT-GLAZE	0.000 ZA	1/16W	R5625	301 218 8615	MT-GLAZE	5.6 JA	1W
R4834	301 225 1210	MT-GLAZE	4.7K JA	1/16W	R5641	301 224 9316	MT-GLAZE	1K JA	1/16W
R4860	301 226 1516	MT-GLAZE	0.000 ZA	1/16W	R567	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R4861	301 150 6014	MT-GLAZE	0.000 ZA	1/10W	R568	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R4862	301 226 1516	MT-GLAZE	0.000 ZA	1/16W	R5704	301 253 3712	MT-GLAZE	0.000 ZA	1/4W
R4863	301 229 3913	MT-GLAZE	180 JA	1/16W		301 035 4111	MT-GLAZE	0.000 ZA	1/8W
R5001	301 037 5017	MT-GLAZE	0.000 ZA	1/10W	R5707	301 253 3712	MT-GLAZE	0.000 ZA	1/4W
R5002	301 225 8110	MT-GLAZE	10 JA	1/16W		301 035 4111	MT-GLAZE	0.000 ZA	1/8W
R5003	301 225 8110	MT-GLAZE	10 JA	1/16W	R571	301 224 8814	MT-GLAZE	100 JA	1/16W
R5004	301 224 8913	MT-GLAZE	100K JA	1/16W	R572	301 224 8814	MT-GLAZE	100 JA	1/16W
R5005	301 224 8913	MT-GLAZE	100K JA	1/16W	R5751	301 224 9019	MT-GLAZE	10K JA	1/16W
R5006	301 224 8913	MT-GLAZE	100K JA	1/16W	R5752	301 225 1210	MT-GLAZE	4.7K JA	1/16W
R5007	301 224 8913	MT-GLAZE	100K JA	1/16W	R5753	301 224 9316	MT-GLAZE	1K JA	1/16W
R501	301 224 8814	MT-GLAZE	100 JA	1/16W	R5754	301 224 9019	MT-GLAZE	10K JA	1/16W
R5031	301 224 8814	MT-GLAZE	100 JA	1/16W	R5756	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R5032	301 224 8814	MT-GLAZE	100 JA	1/16W	R5757	301 224 9019	MT-GLAZE	10K JA	1/16W
R5033	301 225 0213	MT-GLAZE	3.3K JA	1/16W	R576	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R5034	301 224 9316	MT-GLAZE	1K JA	1/16W	R5821	301 225 2118	MT-GLAZE	12K JA	1/16W

Electrical Parts List

Key No.	Part No.	Description			Key No.	Part No.	Description		
R5822	301 224 8913	MT-GLAZE	100K JA	1/16W	R801	301 224 9019	MT-GLAZE	10K JA	1/16W
R5823	301 294 3016	MT-GLAZE	10K FA	1/16W	R8039	301 341 0616	MT-GLAZE	49.9 FA	1/16W
R5824	301 294 3511	MT-GLAZE	27K FA	1/16W	R804	301 224 9019	MT-GLAZE	10K JA	1/16W
R5841	301 294 3115	MT-GLAZE	1K FA	1/16W	R8049	301 341 0616	MT-GLAZE	49.9 FA	1/16W
R5861	301 234 9917	MT-GLAZE	6.8K JA	1/16W	R8059	301 341 0616	MT-GLAZE	49.9 FA	1/16W
R5863	301 294 3016	MT-GLAZE	10K FA	1/16W	R806	301 226 1516	MT-GLAZE	0.000 ZA	1/16
R5864	301 294 3016	MT-GLAZE	10K FA	1/16W	R8069	301 341 0616	MT-GLAZE	49.9 FA	1/16W
R5865	301 301 8218	MT-GLAZE	680 FA	1/16W	R807	301 224 9019	MT-GLAZE	10K JA	1/16W
R5866	301 224 8913	MT-GLAZE	100K JA	1/16W	R808	301 224 9019	MT-GLAZE	10K JA	1/16W
R591	301 224 9019	MT-GLAZE	10K JA	1/16W	R809	301 225 8516	MT-GLAZE	1.8K JA	1/16W
R592	301 225 1210	MT-GLAZE	4.7K JA	1/16W	R812	301 224 9316	MT-GLAZE	1K JA	1/16W
R593	301 225 3818	MT-GLAZE	1.5K JA	1/16W	R813	301 224 9316	MT-GLAZE	1K JA	1/16W
R595	301 225 1210	MT-GLAZE	4.7K JA	1/16W	R8801	301 224 9316	MT-GLAZE	1K JA	1/16W
R6801	301 225 0213	MT-GLAZE	3.3K JA	1/16W	R8802	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R6802	301 226 1516	MT-GLAZE	0.000 ZA	1/16W	R8804	301 225 1210	MT-GLAZE	4.7K JA	1/16W
R6803	301 224 9019	MT-GLAZE	10K JA	1/16W	R8805	301 224 9316	MT-GLAZE	1K JA	1/16W
R6804	301 225 0213	MT-GLAZE	3.3K JA	1/16W	R8806	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R6806	301 224 9217	MT-GLAZE	15K JA	1/16W	R8809	301 224 8814	MT-GLAZE	100 JA	1/16W
R6807	301 234 9917	MT-GLAZE	6.8K JA	1/16W	R8810	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R6808	301 225 1517	MT-GLAZE	3.9K JA	1/16W	R8811	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R6809	301 225 0213	MT-GLAZE	3.3K JA	1/16W	R8812	301 225 8110	MT-GLAZE	10 JA	1/16W
R6811	301 226 1516	MT-GLAZE	0.000 ZA	1/16W	R8813	301 225 8110	MT-GLAZE	10 JA	1/16W
R6812	301 225 0213	MT-GLAZE	3.3K JA	1/16W	R8814	301 224 9415	MT-GLAZE	1M JA	1/16W
R6813	301 224 9019	MT-GLAZE	10K JA	1/16W	R8815	301 225 1210	MT-GLAZE	4.7K JA	1/16W
R6818	301 225 1517	MT-GLAZE	3.9K JA	1/16W	R8816	301 264 6511	MT-GLAZE	2.2K FA	1/10W
R6821	301 226 1516	MT-GLAZE	0.000 ZA	1/16W	R8821	301 225 8110	MT-GLAZE	10 JA	1/16W
R6822	301 225 0213	MT-GLAZE	3.3K JA	1/16W	R8822	301 225 8110	MT-GLAZE	10 JA	1/16W
R6823	301 224 9019	MT-GLAZE	10K JA	1/16W	R8828	301 224 9019	MT-GLAZE	10K JA	1/16W
R6831	301 226 1516	MT-GLAZE	0.000 ZA	1/16W	R8831	301 225 8110	MT-GLAZE	10 JA	1/16W
R6832	301 226 1516	MT-GLAZE	0.000 ZA	1/16W	R8832	301 225 8110	MT-GLAZE	10 JA	1/16W
R6836	301 226 1516	MT-GLAZE	0.000 ZA	1/16W	R8833	301 225 7915	MT-GLAZE	220 JA	1/16W
R6837	301 226 1516	MT-GLAZE	0.000 ZA	1/16W	R8834	301 224 9712	MT-GLAZE	22 JA	1/16W
R6842	301 229 3913	MT-GLAZE	180 JA	1/16W	R8835	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R6843	301 229 3913	MT-GLAZE	180 JA	1/16W	R8836	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R6845	301 225 1210	MT-GLAZE	4.7K JA	1/16W	R8837	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R6848	301 225 8011	MT-GLAZE	330 JA	1/16W	R8838	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R6851	301 225 1210	MT-GLAZE	4.7K JA	1/16W	R8839	301 225 7915	MT-GLAZE	220 JA	1/16W
R6857	301 229 3913	MT-GLAZE	180 JA	1/16W	R8840	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R6858	301 229 3913	MT-GLAZE	180 JA	1/16W	R8841	301 224 9019	MT-GLAZE	10K JA	1/16W
R6863	301 150 6014	MT-GLAZE	0.000 ZA	1/10W	R8843	301 224 9019	MT-GLAZE	10K JA	1/16W
R6870	301 225 8011	MT-GLAZE	330 JA	1/16W	R8844	301 224 9019	MT-GLAZE	10K JA	1/16W
R6873	301 229 3913	MT-GLAZE	180 JA	1/16W	R8845	301 253 3712	MT-GLAZE	0.000 ZA	1/4W
R6874	301 225 1210	MT-GLAZE	4.7K JA	1/16W		301 035 4111	MT-GLAZE	0.000 ZA	1/8W
R6877	301 225 1210	MT-GLAZE	4.7K JA	1/16W	R8846	301 224 8913	MT-GLAZE	100K JA	1/16W
R7803	301 224 9019	MT-GLAZE	10K JA	1/16W	R8850	301 150 6014	MT-GLAZE	0.000 ZA	1/10W
R7805	301 225 1210	MT-GLAZE	4.7K JA	1/16W	R8907	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R7816	301 225 8110	MT-GLAZE	10 JA	1/16W	R8908	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R7818	301 294 3016	MT-GLAZE	10K FA	1/16W	R891	301 224 8814	MT-GLAZE	100 JA	1/16W
R7819	301 224 8913	MT-GLAZE	100K JA	1/16W	R898	301 224 8814	MT-GLAZE	100 JA	1/16W
R7821	301 294 3511	MT-GLAZE	27K FA	1/16W	R9878	301 225 3818	MT-GLAZE	1.5K JA	1/16W
R7824	301 294 2811	MT-GLAZE	2.2K FA	1/16W	R9883	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R7828	301 224 9019	MT-GLAZE	10K JA	1/16W	R9888	301 226 1516	MT-GLAZE	0.000 ZA	1/16W
R7829	301 224 9316	MT-GLAZE	1K JA	1/16W	R9895	301 225 8011	MT-GLAZE	330 JA	1/16W
R7831	301 224 9316	MT-GLAZE	1K JA	1/16W	R9986	301 224 9019	MT-GLAZE	10K JA	1/16W
R7832	301 225 1210	MT-GLAZE	4.7K JA	1/16W	RB301	945 037 0831	R-NETWORK	47X4	1/16W
R7833	301 225 0213	MT-GLAZE	3.3K JA	1/16W	RB302	945 037 0831	R-NETWORK	47X4	1/16W
R7834	301 286 4717	MT-GLAZE	30K JA	1/16W	RB303	945 037 0831	R-NETWORK	47X4	1/16W
R7866	301 225 8110	MT-GLAZE	10 JA	1/16W	RB304	945 037 0831	R-NETWORK	47X4	1/16W
R7869	301 224 8913	MT-GLAZE	100K JA	1/16W	RB306	945 037 0831	R-NETWORK	47X4	1/16W
R7871	301 294 3511	MT-GLAZE	27K FA	1/16W	RB307	945 037 0831	R-NETWORK	47X4	1/16W
R7874	301 294 2811	MT-GLAZE	2.2K FA	1/16W	RB308	945 037 0831	R-NETWORK	47X4	1/16W
R7878	301 224 9019	MT-GLAZE	10K JA	1/16W	RB309	945 037 0831	R-NETWORK	47X4	1/16W
R7879	301 224 9316	MT-GLAZE	1K JA	1/16W	RB411	945 037 0831	R-NETWORK	47X4	1/16W
R7881	301 224 9316	MT-GLAZE	1K JA	1/16W	RB412	945 037 0831	R-NETWORK	47X4	1/16W
R7882	301 225 1210	MT-GLAZE	4.7K JA	1/16W	RB413	945 037 0831	R-NETWORK	47X4	1/16W
R7883	301 225 0213	MT-GLAZE	3.3K JA	1/16W	RB414	945 037 0831	R-NETWORK	47X4	1/16W
R7884	301 286 4717	MT-GLAZE	30K JA	1/16W	RB416	945 037 0831	R-NETWORK	47X4	1/16W

Electrical Parts List

Key No.	Part No.	Description
RB417	945 037 0831	R-NETWORK 47X4 1/16W
RB418	945 037 0831	R-NETWORK 47X4 1/16W
RB419	945 037 0831	R-NETWORK 47X4 1/16W
RB421	945 037 0831	R-NETWORK 47X4 1/16W
RB422	945 037 0831	R-NETWORK 47X4 1/16W
RB423	945 037 0831	R-NETWORK 47X4 1/16W
RB424	945 037 0831	R-NETWORK 47X4 1/16W
RB426	945 037 0831	R-NETWORK 47X4 1/16W
RB427	945 037 0831	R-NETWORK 47X4 1/16W
RB428	945 037 0831	R-NETWORK 47X4 1/16W
RB429	945 037 0831	R-NETWORK 47X4 1/16W
RB431	945 037 0831	R-NETWORK 47X4 1/16W
RB432	945 037 0831	R-NETWORK 47X4 1/16W
RB433	945 037 0831	R-NETWORK 47X4 1/16W
RB434	945 037 0831	R-NETWORK 47X4 1/16W
RB436	945 037 0831	R-NETWORK 47X4 1/16W
RB437	945 037 0831	R-NETWORK 47X4 1/16W
RB501	645 071 9592	R-NETWORK 0X4 1/32W
	945 036 3529	R-NETWORK 0X4 1/32W
	945 037 0817	R-NETWORK 0X4 1/16W
RB503	645 071 9592	R-NETWORK 0X4 1/32W
	945 036 3529	R-NETWORK 0X4 1/32W
	945 037 0817	R-NETWORK 0X4 1/16W
RB506	645 071 9592	R-NETWORK 0X4 1/32W
	945 036 3529	R-NETWORK 0X4 1/32W
	945 037 0817	R-NETWORK 0X4 1/16W
RB531	645 071 9592	R-NETWORK 0X4 1/32W
	945 036 3529	R-NETWORK 0X4 1/32W
	945 037 0817	R-NETWORK 0X4 1/16W
RB533	645 071 9592	R-NETWORK 0X4 1/32W
	945 036 3529	R-NETWORK 0X4 1/32W
	945 037 0817	R-NETWORK 0X4 1/16W
RB536	645 071 9592	R-NETWORK 0X4 1/32W
	945 036 3529	R-NETWORK 0X4 1/32W
	945 037 0817	R-NETWORK 0X4 1/16W
RB561	945 036 3529	R-NETWORK 0X4 1/32W
	945 037 0817	R-NETWORK 0X4 1/16W
RB563	645 071 9592	R-NETWORK 0X4 1/32W
	945 036 3529	R-NETWORK 0X4 1/32W
	945 037 0817	R-NETWORK 0X4 1/16W
RB566	645 071 9592	R-NETWORK 0X4 1/32W
	945 036 3529	R-NETWORK 0X4 1/32W
	945 037 0817	R-NETWORK 0X4 1/16W
COIL		
L1002	945 086 7577	FILTER,EMI 400MHZ
L1012	945 086 7577	FILTER,EMI 400MHZ
L1022	945 086 7577	FILTER,EMI 400MHZ
L1051	945 086 7577	FILTER,EMI 400MHZ
L1061	945 086 7577	FILTER,EMI 400MHZ
L1071	945 086 7577	FILTER,EMI 400MHZ
L1421	945 041 1978	INDUCTOR,330 OHM
L2011	301 037 5017	MT-GLAZE 0.000 ZA 1/10W
L2012	945 068 8318	FILTER,EMI 100MHZ
L2021	301 037 5017	MT-GLAZE 0.000 ZA 1/10W
L2022	945 068 8318	FILTER,EMI 100MHZ
L2031	301 037 5017	MT-GLAZE 0.000 ZA 1/10W
L2032	945 068 8318	FILTER,EMI 100MHZ
L2041	945 068 8325	FILTER,EMI 20MHZ
L2051	945 068 8325	FILTER,EMI 20MHZ
L3002	945 068 8325	FILTER,EMI 20MHZ
L3011	945 068 8325	FILTER,EMI 20MHZ
L3051	945 068 8325	FILTER,EMI 20MHZ
L3061	945 068 8325	FILTER,EMI 20MHZ
L341	945 086 5368	IMPEDANCE,220 OHM P
L3501	945 041 1978	INDUCTOR,330 OHM
L351	945 086 5368	IMPEDANCE,220 OHM P
L352	945 086 5368	IMPEDANCE,220 OHM P
L353	945 086 5368	IMPEDANCE,220 OHM P
L3531	945 041 1978	INDUCTOR,330 OHM
L3534	945 041 2210	INDUCTOR,0.12U K
L354	945 086 5368	IMPEDANCE,220 OHM P
L356	945 086 5368	IMPEDANCE,220 OHM P
L3561	945 041 1978	INDUCTOR,330 OHM
L357	945 086 5368	IMPEDANCE,220 OHM P
L361	945 086 5368	IMPEDANCE,220 OHM P
L362	945 086 5368	IMPEDANCE,220 OHM P
L363	945 086 5368	IMPEDANCE,220 OHM P
L366	945 086 5368	IMPEDANCE,220 OHM P
L368	945 086 5368	IMPEDANCE,220 OHM P
L402	945 041 1978	INDUCTOR,330 OHM
L4809	945 018 9327	INDUCTOR,1000 OHM
L4811	945 018 9327	INDUCTOR,1000 OHM
L4812	945 086 5368	IMPEDANCE,220 OHM P
L4814	945 018 9327	INDUCTOR,1000 OHM
L4861	945 086 5368	IMPEDANCE,220 OHM P
L4862	945 086 5368	IMPEDANCE,220 OHM P
L501	945 041 1978	INDUCTOR,330 OHM
L502	945 041 1978	INDUCTOR,330 OHM
L531	945 041 1978	INDUCTOR,330 OHM
L532	945 041 1978	INDUCTOR,330 OHM
L5332	945 032 8344	INDUCTOR,39U J
L5461	945 041 1978	INDUCTOR,330 OHM
L5601	945 041 1978	INDUCTOR,330 OHM
L5602	945 041 1978	INDUCTOR,330 OHM
L5604	945 041 1978	INDUCTOR,330 OHM
L5605	945 041 1978	INDUCTOR,330 OHM
L5606	945 041 1978	INDUCTOR,330 OHM
L5609	945 041 1978	INDUCTOR,330 OHM
L561	945 041 1978	INDUCTOR,330 OHM
L562	945 041 1978	INDUCTOR,330 OHM
L5663	945 041 1978	INDUCTOR,330 OHM
L5702	945 041 1978	INDUCTOR,330 OHM
L5821	652 002 8784	INDUCTOR,10U,N
L5822	945 041 1978	INDUCTOR,330 OHM
L5827	301 037 5017	MT-GLAZE 0.000 ZA 1/10W
L5828	945 041 1978	INDUCTOR,330 OHM
L5829	945 041 1978	INDUCTOR,330 OHM
L5848	945 041 1978	INDUCTOR,330 OHM
L5861	652 002 8784	INDUCTOR,10U,N
L5862	945 041 1978	INDUCTOR,330 OHM
L5867	301 037 5017	MT-GLAZE 0.000 ZA 1/10W
L5868	945 041 1978	INDUCTOR,330 OHM
L591	945 044 9032	FILTER,EMI 2200PF
L7811	652 002 8777	INDUCTOR,33U,N
L7815	945 041 1978	INDUCTOR,330 OHM
L7861	652 002 8777	INDUCTOR,33U,N
L7865	945 041 1978	INDUCTOR,330 OHM
L8801	945 068 8318	FILTER,EMI 100MHZ
DIODE		
D1041	307 223 1115	ZENER DIODE 02DZ6.2Y(TPH3
	307 209 1214	ZD UDZS-TE-176.2B
D1042	307 223 1115	ZENER DIODE 02DZ6.2Y(TPH3
	307 209 1214	ZD UDZS-TE-176.2B
D1091	307 205 5216	DIODE RB521S-30-TE61
D1092	307 205 5216	DIODE RB521S-30-TE61
D2891	307 223 1115	ZENER DIODE 02DZ6.2Y(TPH3
	307 209 1214	ZD UDZS-TE-176.2B
D2892	307 223 1115	ZENER DIODE 02DZ6.2Y(TPH3
	307 209 1214	ZD UDZS-TE-176.2B
D3051	307 163 0414	DIODE 1SS352-(TPH3)
	307 149 0810	DIODE 1SS355-TE-17
D3601	307 163 0414	DIODE 1SS352-(TPH3)

Electrical Parts List

Key No.	Part No.	Description
	307 149 0810	DIODE 1SS355-TE-17
D3602	307 163 0414	DIODE 1SS352-(TPH3)
	307 149 0810	DIODE 1SS355-TE-17
D3606	307 163 0414	DIODE 1SS352-(TPH3)
D3611	307 163 0414	DIODE 1SS352-(TPH3)
	307 149 0810	DIODE 1SS355-TE-17
D3613	307 163 0414	DIODE 1SS352-(TPH3)
	307 149 0810	DIODE 1SS355-TE-17
D3614	307 163 0414	DIODE 1SS352-(TPH3)
	307 149 0810	DIODE 1SS355-TE-17
D3617	307 163 0414	DIODE 1SS352-(TPH3)
	307 149 0810	DIODE 1SS355-TE-17
D3621	307 163 0414	DIODE 1SS352-(TPH3)
	307 149 0810	DIODE 1SS355-TE-17
D3622	307 163 0414	DIODE 1SS352-(TPH3)
	307 149 0810	DIODE 1SS355-TE-17
D3623	307 163 0414	DIODE 1SS352-(TPH3)
	307 149 0810	DIODE 1SS355-TE-17
D3624	307 163 0414	DIODE 1SS352-(TPH3)
	307 149 0810	DIODE 1SS355-TE-17
D3626	307 163 0414	DIODE 1SS352-(TPH3)
	307 149 0810	DIODE 1SS355-TE-17
D3627	307 163 0414	DIODE 1SS352-(TPH3)
	307 149 0810	DIODE 1SS355-TE-17
D4812	307 223 1115	ZENER DIODE 02DZ6.2Y(TPH3
	307 209 1214	ZD UDZS-TE-176.2B
D4813	307 223 1115	ZENER DIODE 02DZ6.2Y(TPH3
	307 209 1214	ZD UDZS-TE-176.2B
D5061	307 163 0414	DIODE 1SS352-(TPH3)
	307 149 0810	DIODE 1SS355-TE-17
D5062	307 163 0414	DIODE 1SS352-(TPH3)
	307 149 0810	DIODE 1SS355-TE-17
D5601	307 210 5416	DIODE RB551V-30-TE-17
D5622	307 163 0414	DIODE 1SS352-(TPH3)
	307 149 0810	DIODE 1SS355-TE-17
D5623	307 163 0414	DIODE 1SS352-(TPH3)
	307 149 0810	DIODE 1SS355-TE-17
D5624	307 163 0414	DIODE 1SS352-(TPH3)
	307 149 0810	DIODE 1SS355-TE-17
D591	307 163 0414	DIODE 1SS352-(TPH3)
	307 149 0810	DIODE 1SS355-TE-17
D6801	307 223 1115	ZENER DIODE 02DZ6.2Y(TPH3
	307 209 1214	ZD UDZS-TE-176.2B
D6802	307 223 1115	ZENER DIODE 02DZ6.2Y(TPH3
	307 209 1214	ZD UDZS-TE-176.2B
D6803	307 223 1115	ZENER DIODE 02DZ6.2Y(TPH3
	307 209 1214	ZD UDZS-TE-176.2B
D6804	307 223 1115	ZENER DIODE 02DZ6.2Y(TPH3
	307 209 1214	ZD UDZS-TE-176.2B
D6831	307 209 7513	LED SML-210YT T86 L
D6832	307 203 7816	LED SML-210LT T86 M
D6833	307 222 4810	LED SML-521MUW T86
D6840	307 163 0414	DIODE 1SS352-(TPH3)
	307 149 0810	DIODE 1SS355-TE-17
D6841	307 223 1115	ZENER DIODE 02DZ6.2Y(TPH3
	307 209 1214	ZD UDZS-TE-176.2B
D6842	307 223 1115	ZENER DIODE 02DZ6.2Y(TPH3
	307 209 1214	ZD UDZS-TE-176.2B
D6843	307 223 1115	ZENER DIODE 02DZ6.2Y(TPH3
	307 209 1214	ZD UDZS-TE-176.2B
D6844	307 223 1115	ZENER DIODE 02DZ6.2Y(TPH3
	307 209 1214	ZD UDZS-TE-176.2B
D6851	307 163 0414	DIODE 1SS352-(TPH3)
	307 149 0810	DIODE 1SS355-TE-17
D6854	307 163 0414	DIODE 1SS352-(TPH3)
	307 149 0810	DIODE 1SS355-TE-17
D7812	307 254 2716	DIODE CMS16
D7862	307 254 2716	DIODE CMS16
D8801	307 209 7513	LED SML-210YT T86 L
D8902	307 163 0414	DIODE 1SS352-(TPH3)
	307 149 0810	DIODE 1SS355-TE-17
MISCELLANEOUS		
FB2891	945 041 1978	INDUCTOR,330 OHM
FB3621	945 041 1978	INDUCTOR,330 OHM
FB3622	945 041 1978	INDUCTOR,330 OHM
FB3623	945 041 1978	INDUCTOR,330 OHM
FB3624	945 041 1978	INDUCTOR,330 OHM
FB3626	945 041 1978	INDUCTOR,330 OHM
FB3627	945 041 1978	INDUCTOR,330 OHM
K10A	952 001 8601	SOCKET,D-SUB 15P
K10B	952 001 8571	SOCKET,D-SUB 15P
K20A	945 076 2735	JACK,RCA-2
	952 001 9585	JACK,RCA-2
K20B	945 067 6124	TERMINAL,BOARD
	952 001 7932	TERMINAL, BOARD
K30B	945 076 2742	JACK,PHON D3.6
	652 002 1808	JACK,PHONE D3.6
	652 002 4847	JACK,PHONE D3.6
K40B	945 078 1613	SOCKET,DIN 8P
	952 001 8427	SOCKET,DIN 8P
K9602	645 093 6760	TRANS,PULSE
SC1031	945 076 3503	SURGE-ABSORBER
SC1041	945 076 3503	SURGE-ABSORBER
SC1081	945 076 3503	SURGE-ABSORBER
SC1091	945 076 3503	SURGE-ABSORBER
SC2011	945 076 3503	SURGE-ABSORBER
SC2021	945 076 3503	SURGE-ABSORBER
SC2031	945 076 3503	SURGE-ABSORBER
SC2041	945 076 3503	SURGE-ABSORBER
SC2051	945 076 3503	SURGE-ABSORBER
SC3001	945 076 3503	SURGE-ABSORBER
SC3011	945 076 3503	SURGE-ABSORBER
SC3051	945 076 3503	SURGE-ABSORBER
SC3061	945 076 3503	SURGE-ABSORBER
SC5053	945 076 3503	SURGE-ABSORBER
SC5054	945 076 3503	SURGE-ABSORBER
SC5607	945 076 3503	SURGE-ABSORBER
SC5608	945 076 3503	SURGE-ABSORBER
SW6801	945 026 2792	SWITCH,PUSH 1P-1TX1
	952 001 8830	SWITCH,PUSH 1P-1TX1
SW6802	945 026 2792	SWITCH,PUSH 1P-1TX1
	952 001 8830	SWITCH,PUSH 1P-1TX1
SW6803	945 026 2792	SWITCH,PUSH 1P-1TX1
	952 001 8830	SWITCH,PUSH 1P-1TX1
SW6804	945 026 2792	SWITCH,PUSH 1P-1TX1
	952 001 8830	SWITCH,PUSH 1P-1TX1
SW6806	945 026 2792	SWITCH,PUSH 1P-1TX1
	952 001 8830	SWITCH,PUSH 1P-1TX1
SW6807	945 026 2792	SWITCH,PUSH 1P-1TX1
	952 001 8830	SWITCH,PUSH 1P-1TX1
SW6808	945 026 2792	SWITCH,PUSH 1P-1TX1
	952 001 8830	SWITCH,PUSH 1P-1TX1
SW6809	945 026 2792	SWITCH,PUSH 1P-1TX1
	952 001 8830	SWITCH,PUSH 1P-1TX1
SW6811	945 026 2792	SWITCH,PUSH 1P-1TX1
	952 001 8830	SWITCH,PUSH 1P-1TX1
X341	945 088 7179	OSC,CRYSTAL 27.0MHZ
X8802	945 083 7556	OSC,CRYSTAL 25.0MHZ
X9985	945 065 3538	CRYSTAL 14.7456MHZ

655 003 1426 ASSY,PWB,R/C LM5EZ

Electrical Parts List

Key No.	Part No.	Description		
CAPACITOR				
C2951	403 455 1012	CERAMIC	1U K	10V
	303 433 1112	CERAMIC	1U K	10V
C2952	303 453 8719	CERAMIC	470P K	50V
	303 453 9211	CERAMIC	470P K	50V
	303 282 5118	CERAMIC	470P K	50V
C2953	403 457 3311	CERAMIC	47U M	6.3V
	303 380 0114	CERAMIC	47U M	6.3V
RESISTOR				
R2951	301 225 1814	MT-GLAZE	47 JA	1/16W
R2952	301 224 8814	MT-GLAZE	100 JA	1/16W
MISCELLANEOUS				
A2951	652 002 3352	UNIT,REMOCON,RECEIVER		

655 002 8884 ASSY,PWB, POWER KM5AD

TRANSISTOR				
Q601	305 134 5928	TR 2SA1037AK-T146-R		
	305 147 2218	TR 2SA1037AK-S-T146		
	305 173 9618	TR 2SA1235A1E		
	305 173 9717	TR 2SA1235A1F		
	405 220 3115	TR ISA1235AC1E		
	405 220 3016	TR ISA1235AC1F		
Q602	305 014 4512	TR 2SC2412K T146 R		
	305 014 4611	TR 2SC2412K T146 S		
	305 015 8727	TR 2SC2812-L6-TB		
	305 015 8925	TR 2SC2812-L7-TB		
	305 163 1615	TR 2SC2812N-L6-TB0		
	305 173 9816	TR 2SC3928A1R		
	305 173 9915	TR 2SC3928A1S		
Q611	305 140 3707	TR 2SK2698		
Q621	305 014 4512	TR 2SC2412K T146 R		
	305 014 4611	TR 2SC2412K T146 S		
	305 015 8727	TR 2SC2812-L6-TB		
	305 015 8925	TR 2SC2812-L7-TB		
	305 163 1615	TR 2SC2812N-L6-TB0		
	305 173 9816	TR 2SC3928A1R		
	305 173 9915	TR 2SC3928A1S		
Q622	305 134 5928	TR 2SA1037AK-T146-R		
	305 147 2218	TR 2SA1037AK-S-T146		
	305 173 9618	TR 2SA1235A1E		
	305 173 9717	TR 2SA1235A1F		
	405 220 3115	TR ISA1235AC1E		
	405 220 3016	TR ISA1235AC1F		
Q642	305 014 4512	TR 2SC2412K T146 R		
	305 014 4611	TR 2SC2412K T146 S		
	305 015 8727	TR 2SC2812-L6-TB		
	305 015 8925	TR 2SC2812-L7-TB		
	305 163 1615	TR 2SC2812N-L6-TB0		
	305 173 9816	TR 2SC3928A1R		
	305 173 9915	TR 2SC3928A1S		
Q643	305 217 6600	TR 2SK3934		
Q651	305 014 4512	TR 2SC2412K T146 R		
	305 014 4611	TR 2SC2412K T146 S		
	305 015 8727	TR 2SC2812-L6-TB		
	305 015 8925	TR 2SC2812-L7-TB		
	305 163 1615	TR 2SC2812N-L6-TB0		
	305 173 9816	TR 2SC3928A1R		
	305 173 9915	TR 2SC3928A1S		
Q661	305 047 9010	TR 2SB1204-S-TL-E		
	305 047 9119	TR 2SB1204-T-TL		
Q662	305 014 4512	TR 2SC2412K T146 R		
	305 014 4611	TR 2SC2412K T146 S		
	305 015 8727	TR 2SC2812-L6-TB		
	305 015 8925	TR 2SC2812-L7-TB		
	305 163 1615	TR 2SC2812N-L6-TB0		
	305 173 9816	TR 2SC3928A1R		
	305 173 9915	TR 2SC3928A1S		
INTEGRATED CIRCUIT				
IC621	309 523 1413	IC FA5502M		
IC631	309 558 4202	IC STR-Z2156A		
IC651	309 344 6522	IC UPC1093T-E1		
CAPACITOR				
C605	303 164 0217	CERAMIC	0.1U Z	25V
C611	303 222 1326	CERAMIC	1000P K	1K
C612	303 222 1326	CERAMIC	1000P K	1K
C613	303 371 8518	MT-POLYEST	1U K	400V
	303 427 2019	MT-POLYEST	1U K	400V
	303 451 4119	MT-POLYEST	1U K	450V
C614	303 371 8518	MT-POLYEST	1U K	400V
	303 427 2019	MT-POLYEST	1U K	400V
	303 451 4119	MT-POLYEST	1U K	450V
C615	304 102 7104	ELECT	120U M	420V
	304 106 8800	ELECT	120U M	420V
C616	303 371 8617	MT-POLYEST	0.1U K	450V
	303 427 1814	MT-POLYEST	0.1U K	450V
C62A	303 157 3317	CERAMIC	68P J	50V
C62B	303 157 6615	CERAMIC	470P K	50V
C62C	303 374 4210	CERAMIC	0.33U K	10V
C62D	303 164 0217	CERAMIC	0.1U Z	25V
C62E	303 164 0217	CERAMIC	0.1U Z	25V
C62F	303 370 9110	CERAMIC	0.068U K	50V
C62I	303 149 9211	CERAMIC	0.01U Z	50V
C62J	303 169 2810	CERAMIC	330P J	50V
C62K	303 323 3615	CERAMIC	0.047U K	50V
C62M	303 164 0217	CERAMIC	0.1U Z	25V
C62R	303 417 9912	CERAMIC	4.7U K	25V
C62T	303 164 0217	CERAMIC	0.1U Z	25V
C631	303 268 7013	TA-SOLID	2.2U M	35V
C633	303 113 3818	CERAMIC	1000P K	50V
C634	303 247 3319	CERAMIC	330P K	2K
C635	303 167 8616	CERAMIC	220P K	2K
C636	303 070 2619	CERAMIC	0.1U Z	50V
C637	303 157 6813	CERAMIC	680P K	50V
C638	303 182 8110	TA-SOLID	1U M	25V
	303 208 1415	TA-SOLID	1U M	25V
	303 411 5712	TA-SOLID	1U M	25V
C639	303 410 7618	ELECT	220U M	35V
C640	303 164 0217	CERAMIC	0.1U Z	25V
C641	303 352 8216	CERAMIC	0.47U Z	16V
C642	303 084 0311	POLYPRO	0.022U J	630V
C643	303 256 2419	CERAMIC	0.22U Z	50V
C644	303 417 9912	CERAMIC	4.7U K	25V
C651	303 392 0703	ELECT	1000U M	25V
C652	303 427 6245	ELECT	1000U M	10V
C653	303 437 4713	ELECT	470U M	16V
C654	303 164 0217	CERAMIC	0.1U Z	25V
C655	303 164 0217	CERAMIC	0.1U Z	25V
C656	303 345 9619	CERAMIC	0.47U K	10V
C657	303 157 6417	CERAMIC	330P K	50V
C658	303 157 6417	CERAMIC	330P K	50V
C659	303 199 6344	ELECT	1000U M	25V
	303 400 6822	ELECT	1000U M	25V
C660	303 164 0217	CERAMIC	0.1U Z	25V
C661	303 358 3215	CERAMIC	10U K	6.3V
	303 368 7319	CERAMIC	10U K	6.3V
C691	303 400 7136	ELECT	330U M	25V
	304 106 9708	ELECT	330U M	25V
C693	303 219 7829	ELECT	1000U M	10V
	303 400 5023	ELECT	1000U M	10V

Electrical Parts List

Key No.	Part No.	Description		
C694	303 443 4605	ELECT	1000U M	6.3V
RESISTOR				
R603	301 255 8517	MT-GLAZE	9.1K JA	1/10W
R604	301 256 6611	MT-GLAZE	68K JA	1/10W
R606	301 162 4015	MT-GLAZE	560 JA	1/10W
R607	301 162 2417	MT-GLAZE	1.2K JA	1/10W
R611	302 088 0102	RESISTER	0.15 KA	2W
R612	302 088 0102	RESISTER	0.15 KA	2W
R615	301 242 3914	MT-GLAZE	240K JA	1/2W
R616	301 242 3914	MT-GLAZE	240K JA	1/2W
R617	301 259 9015	MT-GLAZE	150K FA	1/2W
R618	301 259 9015	MT-GLAZE	150K FA	1/2W
R619	301 259 9015	MT-GLAZE	150K FA	1/2W
R61A	301 275 2915	MT-GLAZE	68K JA	1W
R61B	301 275 2915	MT-GLAZE	68K JA	1W
R61E	301 275 2915	MT-GLAZE	68K JA	1W
R61F	301 275 2915	MT-GLAZE	68K JA	1W
R620	301 259 9015	MT-GLAZE	150K FA	1/2W
R623	301 162 3711	MT-GLAZE	4.7K JA	1/10W
R62A	301 256 3818	MT-GLAZE	1.5K JA	1/10W
R62B	301 150 5918	MT-GLAZE	10K JA	1/10W
R62C	301 162 3810	MT-GLAZE	470K JA	1/10W
R62D	301 255 6810	MT-GLAZE	30K JA	1/10W
R62E	301 256 3719	MT-GLAZE	750 JA	1/10W
R62F	301 264 2810	MT-GLAZE	1.2K FA	1/10W
R62G	301 255 6513	MT-GLAZE	100 JA	1/10W
R62H	301 152 3219	MT-GLAZE	330 JA	1/10W
R62I	301 265 0914	MT-GLAZE	4.7 JA	1/10W
R62J	301 162 2714	MT-GLAZE	180 JA	1/10W
R62L	301 256 2613	MT-GLAZE	2.4K JA	1/10W
R62M	301 256 7519	MT-GLAZE	390 JA	1/10W
R62P	301 256 6314	MT-GLAZE	47K JA	1/10W
R62Q	301 255 8715	MT-GLAZE	22 JA	1/10W
R62R	301 256 4716	MT-GLAZE	5.6M JA	1/10W
R62T	301 255 9514	MT-GLAZE	220K JA	1/10W
⚠R631	324 006 1305	FUSE	250V	2.5A
R633	301 323 4618	MT(LEADFREE	15 JA	3/4W
R634	301 238 4512	MT-GLAZE	47 JA	1/3W
R635	301 150 6212	MT-GLAZE	1K JA	1/10W
R636	301 257 7419	MT-GLAZE	120 JA	1/3W
R637	301 162 3711	MT-GLAZE	4.7K JA	1/10W
R638	301 150 5918	MT-GLAZE	10K JA	1/10W
R639	301 256 2613	MT-GLAZE	2.4K JA	1/10W
R641	301 188 0114	MT-GLAZE	18K JA	1/4W
R646	301 150 5918	MT-GLAZE	10K JA	1/10W
R647	301 256 5911	MT-GLAZE	2.7K JA	1/10W
R648	301 256 3610	MT-GLAZE	15K JA	1/10W
R651	301 150 6212	MT-GLAZE	1K JA	1/10W
R652	301 162 2219	MT-GLAZE	10 JA	1/10W
R653	301 326 1713	MT-GLAZE	10K DA	1/10W
R654	301 152 3219	MT-GLAZE	330 JA	1/10W
R655	301 256 7311	MT-GLAZE	6.8K JA	1/10W
R656	301 256 6215	MT-GLAZE	270 JA	1/10W
R657	301 150 6212	MT-GLAZE	1K JA	1/10W
R658	301 150 6212	MT-GLAZE	1K JA	1/10W
R659	301 150 6212	MT-GLAZE	1K JA	1/10W
R660	301 162 3711	MT-GLAZE	4.7K JA	1/10W
R661	301 150 5918	MT-GLAZE	10K JA	1/10W
R662	301 230 8013	MT-GLAZE	1K JA	1/3W
R663	301 162 3711	MT-GLAZE	4.7K JA	1/10W
R664	301 150 5918	MT-GLAZE	10K JA	1/10W
VARIABLE RESISTOR				
VR611	945 025 7415	VR,SEMI,1K S		
TRANSFORMER				
⚠T651	945 077 6312	TRANS,POWER,PULSE		
	945 083 6948	TRANS,POWER,PULSE		
COIL				
⚠L612	945 077 6565	INDUCTOR, 900U		
	945 084 0273	INDUCTOR,1400U		
DIODE				
D611	307 191 3903	DIODE FML-G16S		
D612	307 164 4015	DIODE RB160L-40-TE25		
	307 149 6327	DIODE SFPB-54V		
D616	307 163 0414	DIODE 1SS352-(TPH3)		
	307 149 0810	DIODE 1SS355-TE-17		
D617	307 163 0414	DIODE 1SS352-(TPH3)		
	307 149 0810	DIODE 1SS355-TE-17		
D618	307 163 0414	DIODE 1SS352-(TPH3)		
	307 149 0810	DIODE 1SS355-TE-17		
D619	307 163 0414	DIODE 1SS352-(TPH3)		
	307 149 0810	DIODE 1SS355-TE-17		
D62R	307 163 0414	DIODE 1SS352-(TPH3)		
	307 149 0810	DIODE 1SS355-TE-17		
D631	307 247 8827	DIODE RF101L2S		
D633	307 223 0514	ZENER DIODE 02DZ12Y(TPH3)		
	307 221 7119	ZENER DIODE UDZS-TE-1712B		
D636	407 256 3213	DIODE CRF03(TE85L)		
D651	307 222 9607	DIODE FMB-2306		
	307 250 2403	DIODE RB225T-60		
D652	307 222 9706	DIODE FMJ-23L		
	307 250 2502	DIODE RSX1001T3		
D653	307 247 8827	DIODE RF101L2S		
D654	307 223 1115	ZENER DIODE 02DZ6.2Y(TPH3		
	307 209 1214	ZD UDZS-TE-176.2B		
DB611	307 202 7708	DIODE D10XB60		
MISCELLANEOUS				
FB611	910 244 3975	CORE		
FB613	910 244 3975	CORE		
FB691	910 244 3975	CORE		
FB693	910 244 3975	CORE		
FB694	307 210 5416	DIODE RB551V-30-TE-17		
	945 086 6853	72UH(17X17X9-2A-90)		
⚠PC641	307 223 7315	PC TLP421F(D4-GB-TP4)		
	307 223 8312	PC TLP421F(D4-GR-TP4)		
	407 265 7813	PC TLP781F(D4-GB-TP7)		
⚠PC642	307 223 7315	PC TLP421F(D4-GB-TP4)		
	307 223 8312	PC TLP421F(D4-GR-TP4)		
	407 265 7813	PC TLP781F(D4-GB-TP7)		
⚠PC643	307 223 7315	PC TLP421F(D4-GB-TP4)		
	307 223 8312	PC TLP421F(D4-GR-TP4)		
	407 265 7813	PC TLP781F(D4-GB-TP7)		
⚠PTH611	308 037 5501	THERMISTOR NTPDB5R0LDHB0		
⚠PTH612	308 053 9101	THERMISTOR PTFM04BC222Q2N34B0		

655 002 8877 ASSY,PWB,LINE FILTER KM5AD

CAPACITOR				
⚠C601	304 079 5608	MT-POLYEST	0.47U M	275V
	304 094 2002	MT-POLYEST	0.47U K	275V
⚠C602	304 079 5608	MT-POLYEST	0.47U M	275V
	304 094 2002	MT-POLYEST	0.47U K	275V
RESISTOR				
⚠R601	301 287 9018	MT-GLAZE	470K JA	1W
⚠R602	301 287 9018	MT-GLAZE	470K JA	1W
VARIABLE RESISTOR				
⚠VA601	308 061 5607	VARISTOR ENE471D-14A-S6		
	408 061 9701	VARISTOR S14K300E2S5M4,2		
MISCELLANEOUS				

Electrical Parts List

Key No.	Part No.	Description
⚠F601	323 021 7804	FUSE 250V 6.3A
⚠SW901	945 063 8078	SWITCH,PUSH 2P-2TX3

PACKING MATERIALS

610 342 7638	SPACER LENS-KM5AC
610 344 4444	SPACER LENS BTM-KM5AC
610 345 9691	CARTON CASE-KM5AY (For KM5-WXE4600)
610 345 9677	CARTON CASE-KM5AZ (For KM5-WXL4600)
610 340 0280	POLY BAG-LK6AC
610 332 2759	CUSHION SPACER-LK6AC
610 334 5666	CUSHION SPACER TOP-LK6AC
610 334 5765	CUSHION SPACER BTM-LK6AC
610 334 5758	CUSHION SPACER FB-LK6AC
610 334 5826	CUSHION SPACER LR-LK6AC
610 334 5734	CUSHION SPACER LNS SIDE-LK6AC
610 348 0398	LENS CAUTION CARD-KM5YD
645 098 1906	POLY BAG-0550X0600*NC*R8P
655 002 0109	SPACER SHEET-LK6AC
655 002 6910	SPACER SHEET-KM5AC

ACCESSORIES

OWNER'S MANUAL

610 345 8892	CD-ROM,OWNERS MANUAL-KM5AY
655 002 9218	SETUP INST-KM5AY (For KM5-WXE4600)
610 345 8885	CD-ROM,OWNERS MANUAL-KM5AZ
655 002 9133	SETUP INST-KM5AZ (For KM5-WXL4600)
610 343 6456	CD-ROM(PJ NW MANAGER)

AC CORD

⚠US	645 095 0568	CORD,POWER-4.4MK,US
⚠EU	945 054 1156	CORD,POWER-3.0MK
⚠UK	945 054 1149	CORD,POWER-3.138MK

REMOTE CONTROL

945 086 4965	ASSY,REMOCON CXVM
910 321 4482	RC-BATTERY LID-CXTJ

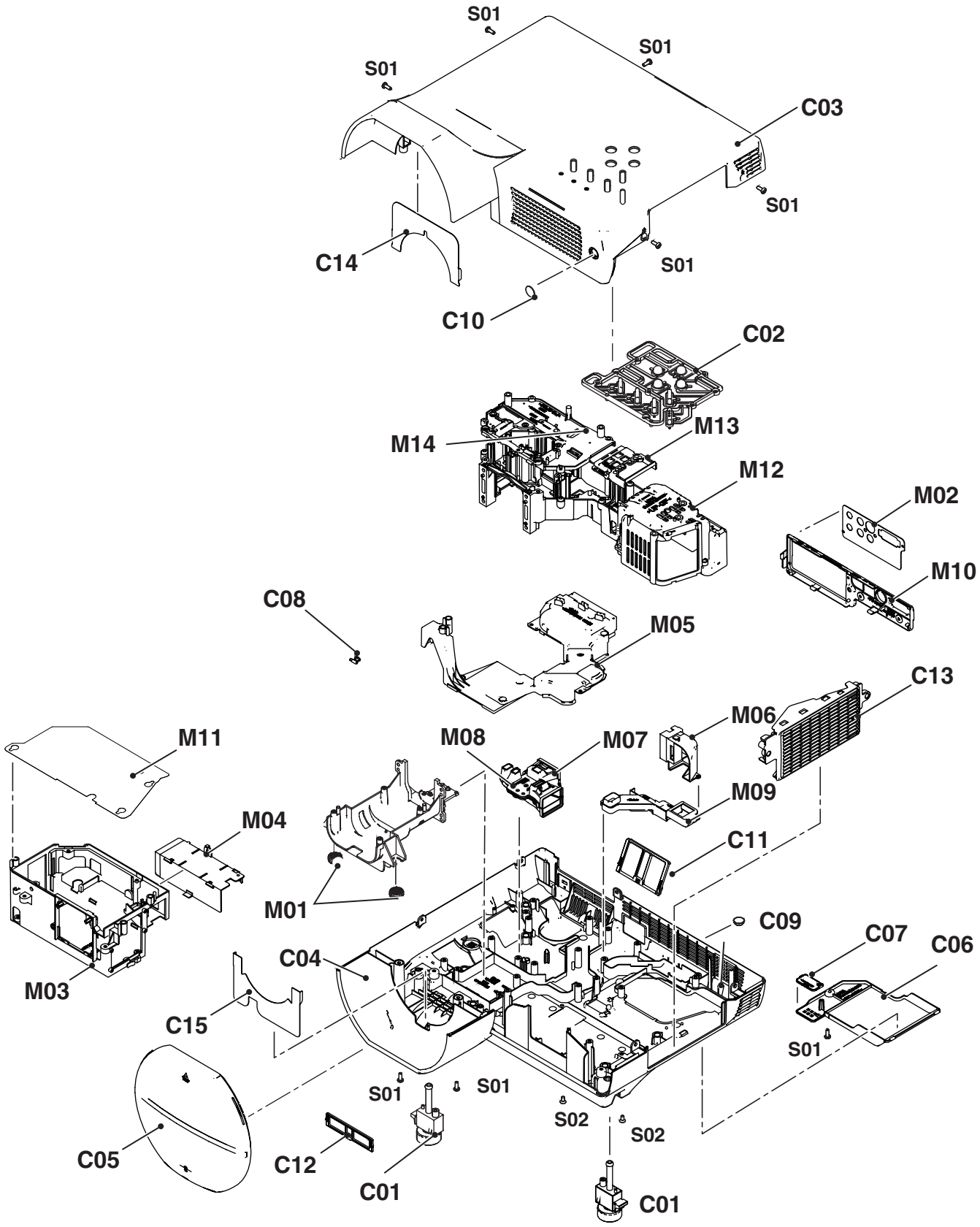
MISCELLANEOUS

610 332 3299	STRAP COMP-LK6AC
945 073 4855	CABLE,INTERFACE VGA
645 093 1642	CABLE,INTERFACE VGA

Key No.	Part No.	Description

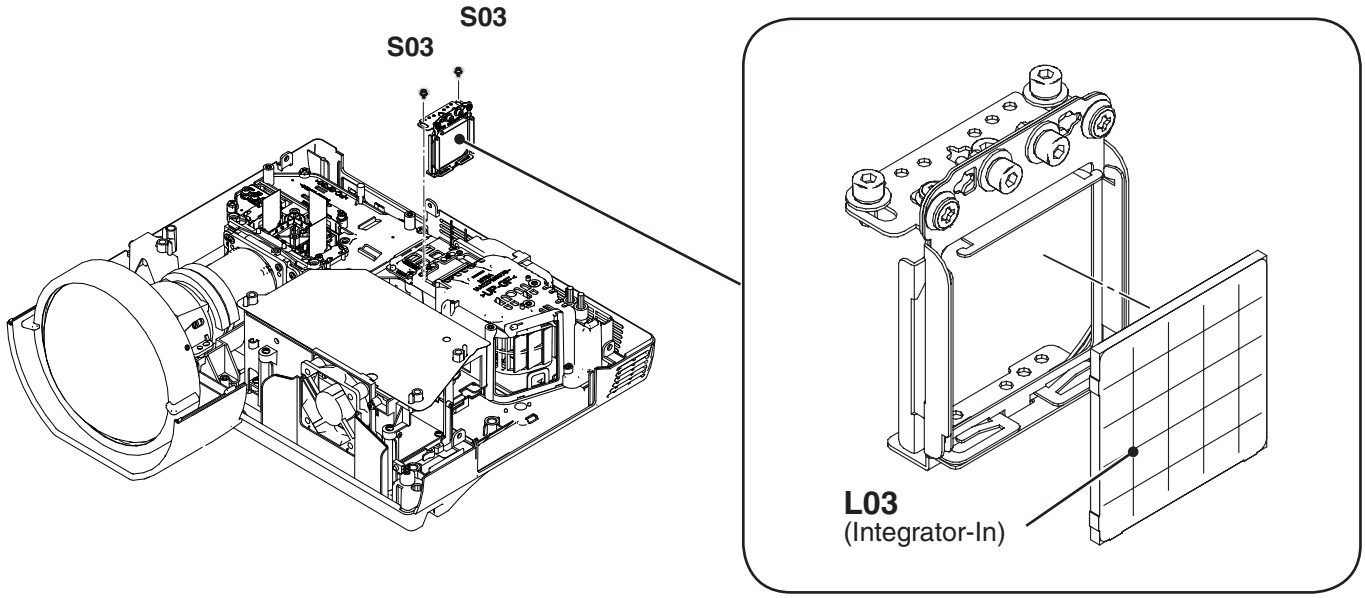
Mechanical Parts List

Cabinet Parts Location

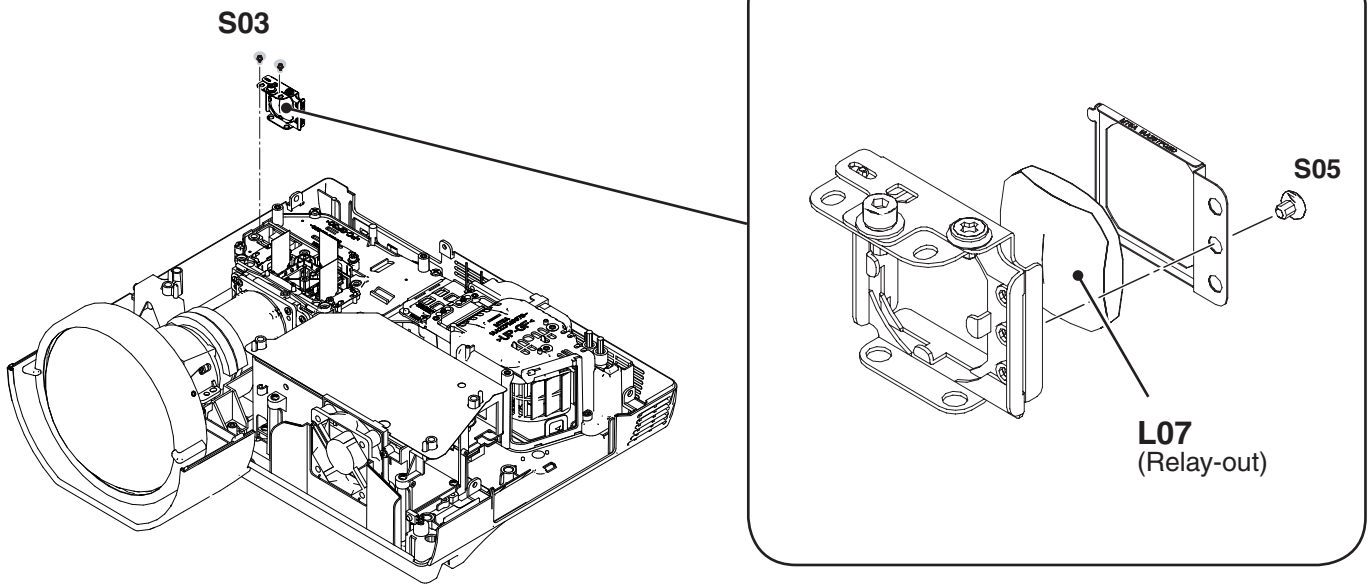


Optical Parts Location

Integrator Lens-In

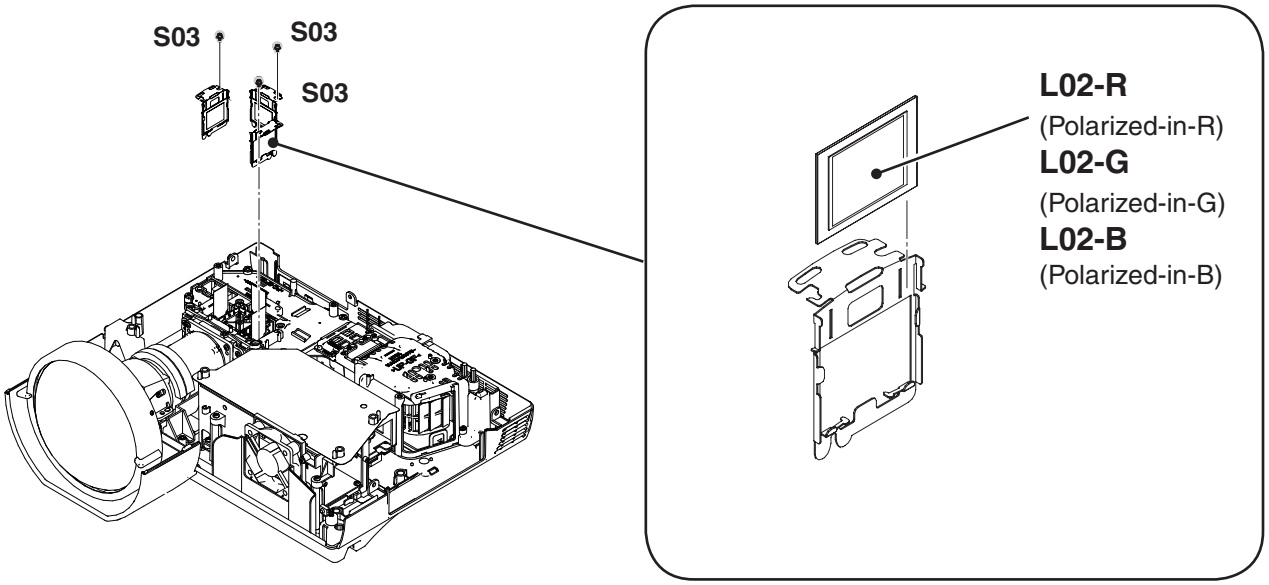


Relay Lens-Out

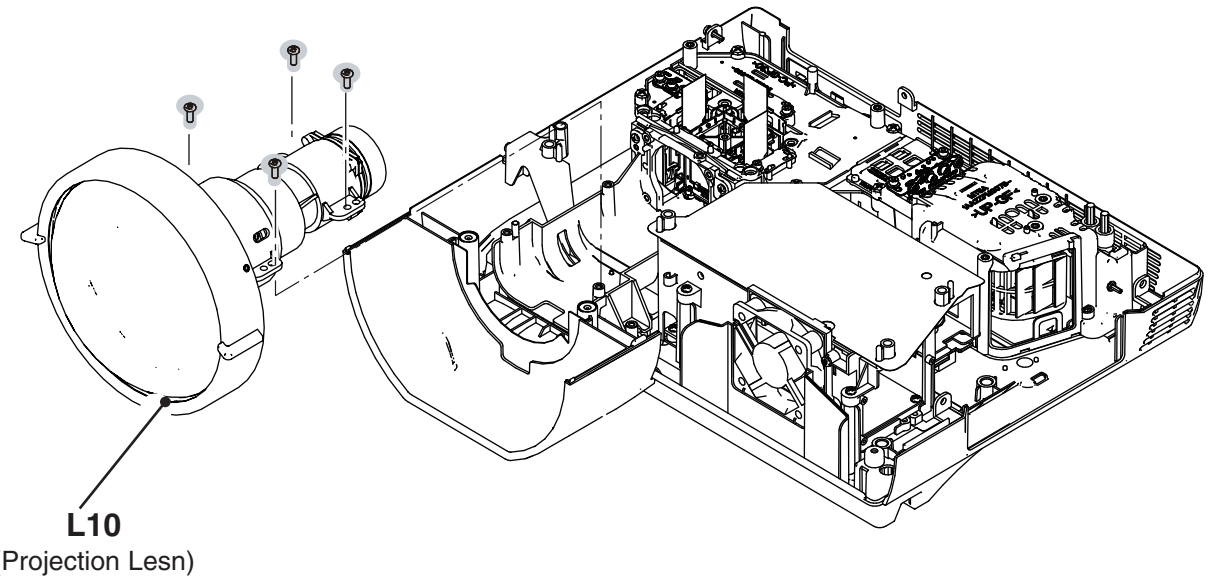


Mechanical Parts List

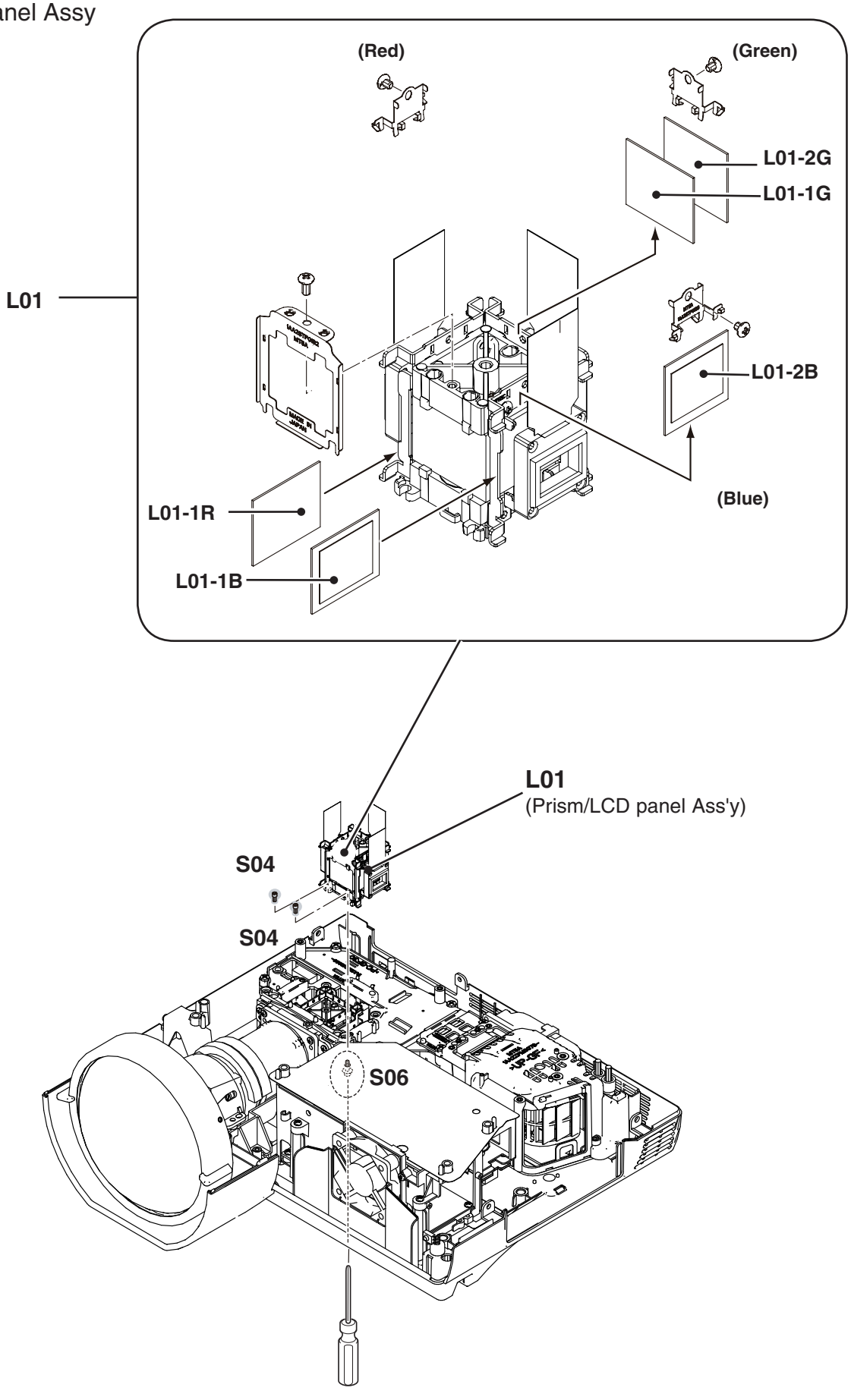
Polarized Glass-In



Projection Lens

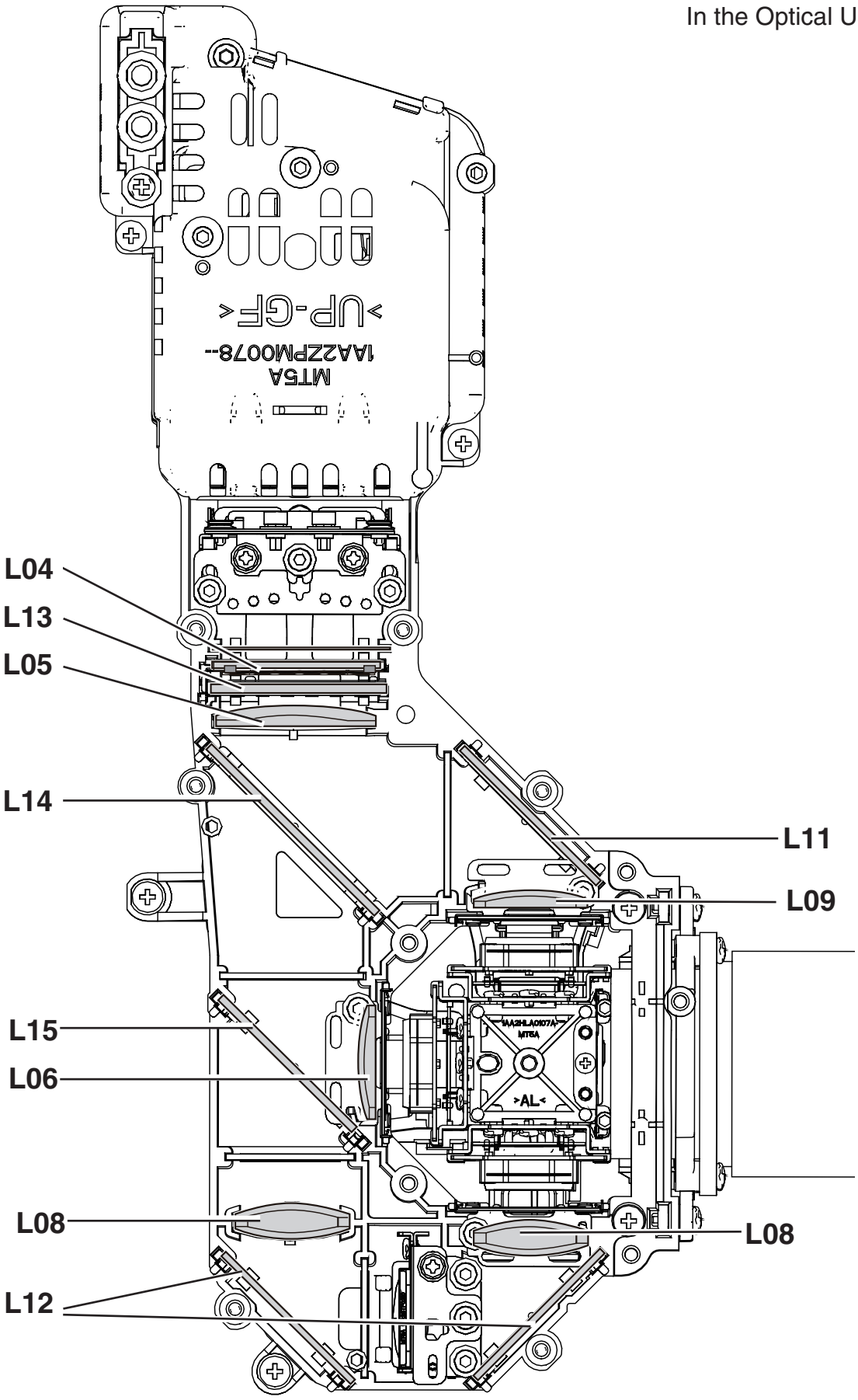


Prism/LCD Panel Assy



Mechanical Parts List

In the Optical Unit



Mechanical Parts List

Note: Parts order must contain Chassis No., Part No., and Descriptions.

Key No.	Part No.	Description
CABINET PARTS		
FOR KM5-WXE4600		
C01	910 323 1779	ASSY,STAND LEG-MT5A
	910 330 9362	ASSY,STAND-KT6AC
C02	910 325 2361	BUTTON-PT5EC
C03	610 345 9783	CABINET TOP SERVICE-KM5AY
C04	610 345 7802	CABINET BOTTOM SERVICE-KM5YD
C05	610 342 7720	CAP LENS-KM5AC
C06	610 332 4364	COVER ,LP SERVICE-LG6AC
C07	910 325 2040	COVER, FUSE-PT5EC
C08	910 325 2538	DEC INLAY LED-PT5EC
C09	910 325 2477	DEC LEG-PT5EC
C10	910 302 5613	DEC SHEET-M4JA
C11	910 325 2033	FILTER BASE B-PT5EC
C12	910 325 1982	FILTER BASE F-PT5EC
C13	610 331 1494	GRILLE -LG6AC
C14	610 342 7546	SPACER SHEET LENS TOP-KM5AC
C15	610 342 7553	SPACER SHEET LENS BTM-KM5AC
FOR KM5-WXL4600		
C01	910 323 1779	ASSY,STAND LEG-MT5A
	910 330 9362	ASSY,STAND-KT6AC
C02	910 325 2361	BUTTON-PT5EC
C03	610 345 9790	CABINET TOP SERVICE-KM5AZ
C04	610 346 0567	CABINET BOTTOM SERVICE-KM5ZD
C05	610 342 7720	CAP LENS-KM5AC
C06	910 327 6893	COVER ,LP SERVICE-PT5EC
C07	910 325 2040	COVER, FUSE-PT5EC
C08	910 325 2538	DEC INLAY LED-PT5EC
C09	910 325 2477	DEC LEG-PT5EC
C10	910 302 5613	DEC SHEET-M4JA
C11	910 325 2033	FILTER BASE B-PT5EC
C12	910 325 1982	FILTER BASE F-PT5EC
C13	910 325 2323	GRILLE -PT5EC
C14	610 342 7546	SPACER SHEET LENS TOP-KM5AC
C15	610 342 7553	SPACER SHEET LENS BTM-KM5AC
CHASSIS PARTS		
M01	610 332 4746	BUSH-KK6A
M02	910 325 2460	DEC AV SHEET-PT5EC
M03	610 331 9025	HOLDER POWER PWB B-KW6AC
M04	910 325 2675	HOLDER LN FLT-PT5EC
M05	610 342 7584	MOUNTING DUCT TOP-KM5AC
M06	910 325 1913	MOUNTING DUCT LP-PT5EC
M07	610 342 7591	MOUNTING DUCT TOP#PNL-KM5AC
M08	610 342 7607	MOUNTING DUCT BTM#PNL-KM5AC
M09	910 330 2493	MOUNTING DUCT PBS-KT6AC
M10	610 342 7614	PANEL AV-KM5AC
M11	910 325 2576	SPACER SHEET#POWER T-PT5EC
M12	910 321 7810	OPTICAL BASE BTM-MT5A
M13	910 321 7896	OPTICAL BASE TOP A-MT5A
M14	910 321 7780	OPTICAL BASE TOP B-MT5A
SCREWS		
S01	411 189 8600	SCR BIN 3X8 (FOR KM5-WXE4600)
S01	411 031 9304	SCR BIN 3X8 (FOR KM5-WXL4600)
S02	411 203 9507	SCR TPG FLT 3X6
S03	411 189 6507	BOLT HEX-SCT+SW+W 2.5X5
S04	312 069 4708	SPECIAL SCREW
S05	411 192 9601	SCR BIN 2X3
S06	312 070 3400	SPECIAL SCREW-3.0X10V

Key No.	Part No.	Description
OPTICAL PARTS		
L01	610 343 2007	ASSY PNL/PSM -KM5AC (Including Key No.L01-1R to L01-2B and LCD Panel)
L01-1R	645 099 2926	POLARIZED GLASS(OUT/R)
L01-1G	645 099 2933	POLARIZED GLASS(OUT/G)
L01-1B	645 099 2940	POLARIZED GLASS(OUT/B)
L01-2G	645 099 5620	PRE-POLARIZED GLASS(OUT/G)
L01-2B	645 099 2759	PRE-POLARIZED GLASS(OUT/B)
L02-R	645 099 2711	POLARIZED GLASS(IN/R)
L02-G	645 100 0378	POLARIZED GLASS(IN/G)
L02-B	645 100 0385	POLARIZED GLASS(IN/B)
L03	645 098 7199	LENS,INTEGRATOR(IN)
L04	645 099 6214	LENS,INTEGRATOR(OUT)NC
L05	945 078 0722	LENS,CONDENSER(OUT)
L06	945 078 0739	LENS,CONDENSER(G)
L07	945 078 0753	LENS,RELAY(OUT)
L08	945 078 0760	LENS,CONDENSER(R)
L09	945 087 1154	LENS,CONDENSER(B)
L10	645 100 1597	LENS,PROJECTION
L11	945 081 7640	MIRROR(B)
L12	945 081 7657	MIRROR(R)
L13	945 078 0845	PRISM(PBS)
L14	945 085 0043	DICHROIC MIRROR (B)
L15	945 078 0784	DAICHROIC MIRROR(G)

(KM5AY, KM5AZ) September 2009 DC 200 Printed in Japan

SANYO Electric Co., Ltd.

Diagrams & Drawings

Schematic Diagrams
Printed Wiring Board Drawings

Model	Chassis No.
PLC-WXE46	KM5-WXE4600
PLC-WXL46	KM5-WXL4600

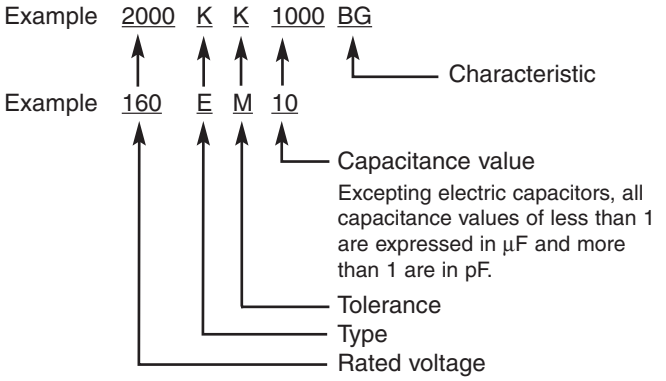
These schematic diagrams and printed wiring board drawings are part of the service manual original for chassis No. KM5-WXE4600 and KM5-WXL4600, models PLC-WXE46 and PLC-WXL46.
File with the service manual No. SM5111073-00.

Note:
All the information of part numbers and values indicated on these diagrams are at the beginning of production. To improve the performance, there may be some differences to the actual set. When you order the service parts, use service parts code mentioned on the parts list in this service manual.

Parts description and reading in schematic diagram

1. The parts specification of resistors, capacitors and coils are expressed in designated code. Please check the parts description by the following code table.
2. Some of transistors and diodes are indicated in mark for the substitution of parts name. Please check the parts name by the following code table.
3. Voltages and waveforms were taken with a video color bar signal(1Vp-p at 75 ohms terminated) and controls to normal.
4. Voltages were taken with a high-impedance digital voltmeter.

Capacitor Reading


Example 2000 K K 1000 BG
Characteristic
Example 160 E M 10
Capacitance value
Excepting electric capacitors, all capacitance values of less than 1 are expressed in μF and more than 1 are in pF.
Tolerance
Type
Rated voltage

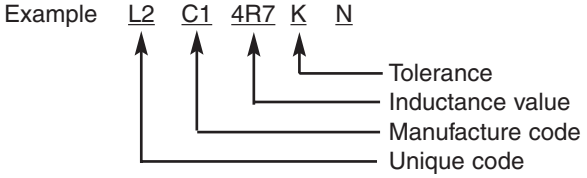
Material table

Mark	Material
E	Electrolytic
P	Electrolytic (non-polarized)
C	Ceramic (temperature compensation)
K	Ceramic
F	Polyester
N	Polypropylene
M	Metalized polypropylene
H	Metalized polypromylar
B	Ceramic (semiconductor)
G	Metalized polyestel
Y	Composite film
S	Styrol
T	Tantalum oxide solid electrolytic
U	Organic semiconductive electrolyte
D	Electric double layer electrolytic

Tolerance table

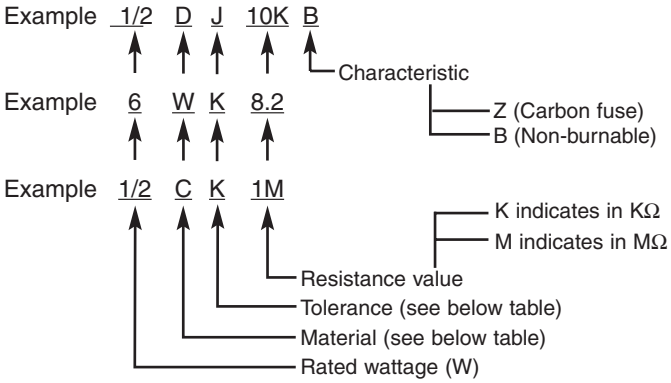
Mark	Tolerance
A	not specified
B	±0.1
C	±0.25
D	±0.5
F	±1
G	±2
E	±2.5
H	±3
J	±5
K	±10
M	±20
N	±30
P	+100 -0
Q	+30 -10
T	+50 -10
U	+75 -10
V	+20 -10
W	+100 -10
X	+40 -20
Y	+150 -10
Z	+80 -20

Coil Reading



Mark	Tolerance (nH)	Mark	Tolerance (%)
C	±0.25	G	±2
D	±0.5	J	±5
S	±0.3	K	±10
A	±0.2	L	±15
		M	±20

Resistor Reading



Note: Resistor which is indicated with resistance value only are 1/6W carbon resistor. Resistor which is indicated with material, tolerance and value are 1/4W rated wattage.

Material table

Mark	Material
D	Carbon
N	Metal film
S	Oxide metal film
C	Solid
G	Metal glaze
W	Wire wounding or cement
H	Ceramic
F	Fusible

Tolerance table

Mark	Tolerance
A	±0.05
B	±0.1
C	±0.25
D	±0.5
F	±1
G	±2
J	±5
K	±10
M	±20
P	+5 -15
Z	used in 0 ohm

Diode/Transistor Type Reading

Diode

Mark	Type number
R	1S2076A,1S2473,1N4148
AA	1S2076A,1S2473,1SS133,1N4148

Transistor

(1) NPN type

Mark	Type number				
--	2SC536	2SC945A	2SC1815	2SC1740S	
AD	NF, NG	PA, QA	Y, GR	Q, R, S	
AE	NF, NG	PA, QA, RA	O, Y, GR	Q, R, S	

(2) PNP type

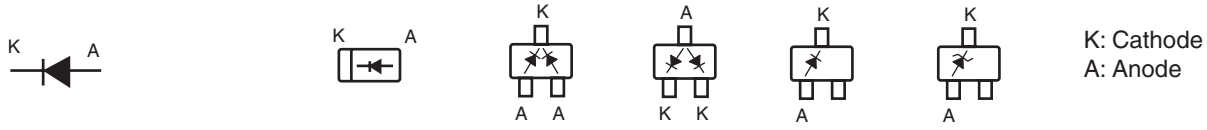
Mark	Type number				
--	2SA608	2SA564A	2SA1015	2SA933S	
AB	NF	R	Y, GR	R	
AC	NF	Q, R	O, Y, GR	Q, R	

(3) Chip type

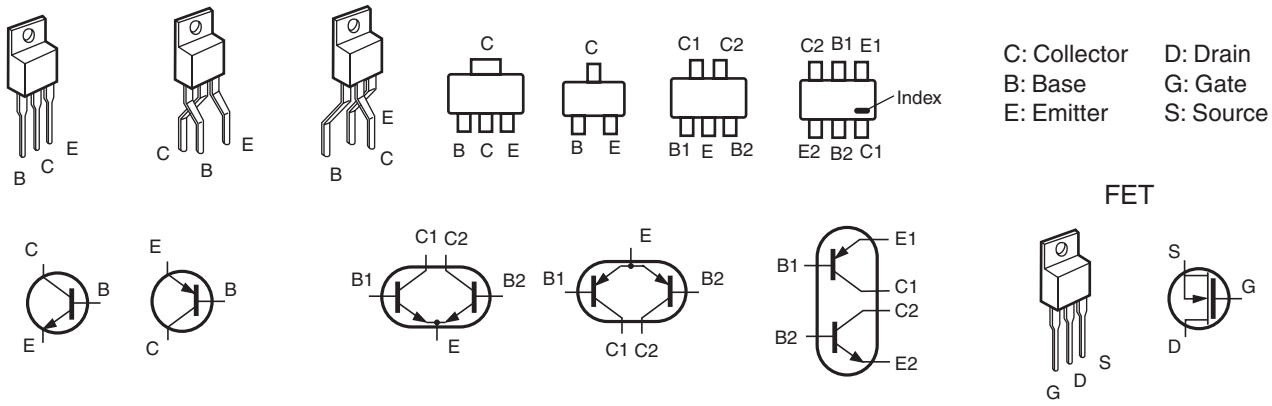
Mark	Type number				
--	2SA1179/N	2SA1037K	2SA1037AK	2SC2812/N	2SC2412K
AJ	M6, M7	R, S	R, S		
AH				L6, L7	R, S

Pin description of diode, transistor and IC

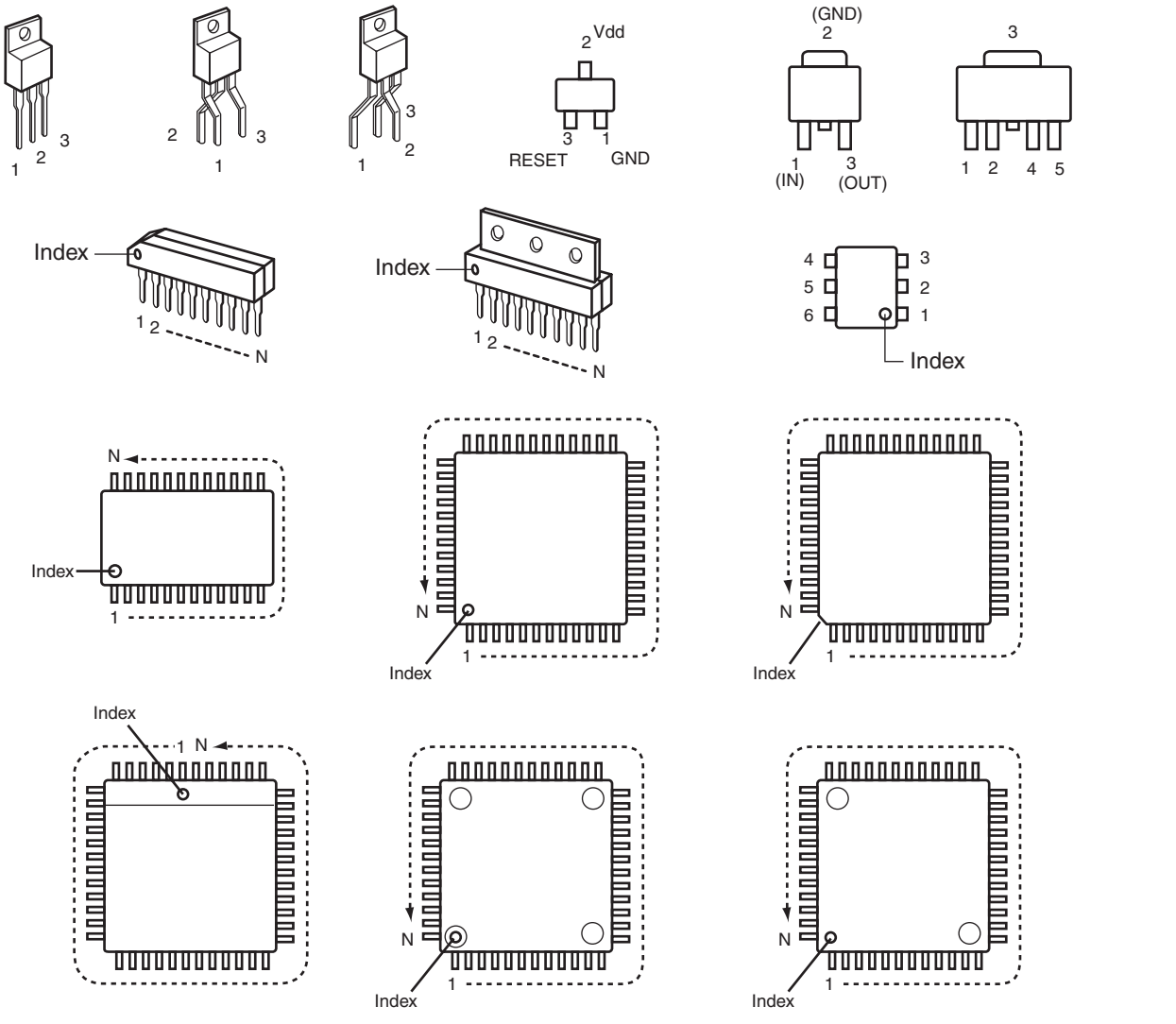
● Diode



● Transistor/FET



● IC



Note on Soldering

Do not use solder containing lead.

This product has been manufactured using lead-free solder in order to help preserve the environment.

Because of this, be sure to use lead-free solder when carrying out repair work, and never use solder containing lead.

Lead-free solder has a melting point that is 30–40 °C (86–104 °F) higher than solder containing lead, and moreover it does not contain lead which attaches easily to other metals. As a result, it does not melt as easily as solder containing lead, and soldering will be more difficult even if the temperature of the soldering iron is increased.

The extra difficulty in soldering means that soldering time will increase and damage to the components or the circuit board may easily occur.

Because of this, you should use a soldering iron and solder that satisfy the following conditions when carrying out repair work. Also, soldering work must be done in a short time.

Soldering iron

Use a soldering iron which is 70 W or equivalent, and which lets you adjust the tip temperature up to 450 °C (842 °F) It should also have as good temperature recovery characteristics as possible.

Solder

Use solder with the metal content and composition ratio by weight given in the table below. Do not use solders which do not meet these conditions.

Metal content	Tin (Sn)	Silver (Ag)	Copper (Cu)
Composition ratio by weight	96.5 %	3.0 %	0.5 %

Note:

If replacing existing solder containing lead with lead-free solder in the soldered parts of products that have been manufactured up until now, remove all of the existing solder at those parts before applying the lead-free solder.

Schematic Diagrams

PROJECTION LENS
1AV4Z10B62200

LINE FILTER
POWER FACTOR CORRECTION
POWER
LAMP BALLAST
MAIN
COLD
HOT
IC621 FA5502M
P.F.CONTROL
IC651 UPC1093T
Power Supply
IC631 STR-Z2156A
R/C
R LCD PANEL
G LCD PANEL
B LCD PANEL

AC CORD
1AV4W11B
20501
AC100-120V
AC200-240V
F.G.
TO MAIN
(TO K8S)
380V
LP900
TO MICRO-SW
(TO K690)
PBS
EXHAUST SIDE LAMP
EXHAUST FRONT
EXHAUST SIDE POWER
B-PNL
G/R-PNL
15.6V (MAX 2.85A)
6.0V (MAX 2.10A)
-5.0V (MAX 0.5A)
TERMOSTAT_SW (SET TO OPEN AT 105+/-5°C)
(SECONDARY CIRCUIT)
(PRIMARY CIRCUIT) (LIVE CIRCUIT)

CAUTION
Fuse of the specified parts number must be used.
Unauthorized substitutions may result in fire or accident.

CAUTION
Components indicated by a mark ⚠ in this schematic diagram have the special significance in the safety. It is therefore, particularly recommended that the replacement of those parts must be made by exactly the same parts.Must be used with a specified fuse. Unauthorized substitutions may result in fire or accident.
This projector is isolated from AC line by using the internal converter transformer. Please pay attention to the following notes in servicing.
1. Do not touch the part on hot side (primary circuit) or both parts on the hot and cold sides (secondary circuit) at the same time.
2. Do not shorten the circuit between hot and cold sides.
3. The grounding lead must be connected to the ground of the same circuit when measuring the voltages and waveform.

PC1
RGB/
YCbCr/
SCART

PC2
RGB-IN/
RGB-OUT

S-VIDEO
VIDEO

VIDEO
AUDIO_IN

CONTROL
PORT

IC1051
24LC21A/SNP

IC4001
AD8075ARUP

IC4701
TC7WT125FUK

IC5301
TC7WH125FUK

IC3801
MAX232ECPWRP

TO IC301 P3

TO IC5001 (P4)

TO IC5031 P4)

FROM IC5001 (P4)

FROM IC301 P3

MONIT_OUT (FROM IC301 P3)

LOW:IN
HIGH:MONITOR OUT

SCART_CV

OUT_DET

OUT_R

OUT_L

DDC_SW

S_SW

S_C

S_Y
VIDEO

VIDEO_L

VIDEO_R

RXD_PW

TXD_PW

PC_R

PC_L

VS1

VS2

HS1

HS2

IC302
TC7SZ125FUK

IC1351
TC7WBD125AFK

IC301
PW190
CPU&SCALER
<TOP_VIEW>

IC1306

IC5821
MP2106DFP

IC5841
TJ3965
D-2.5V

IC5861
MP2106DFP

IC801
FLASH

IC1391

RESET CIRCUIT

FOR 1W STB

27MHz

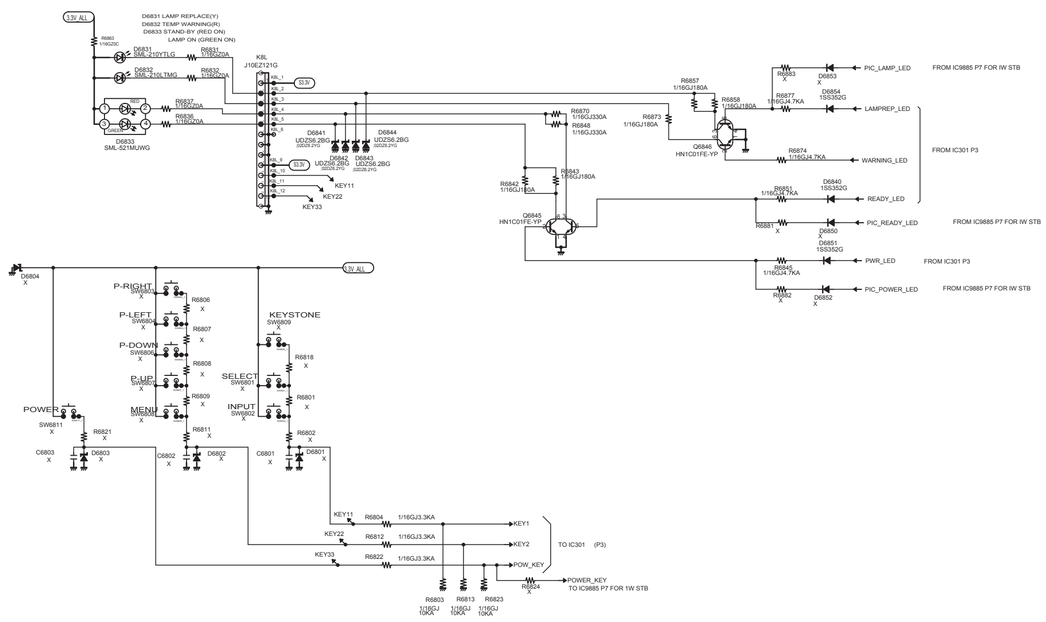
RGB

LED

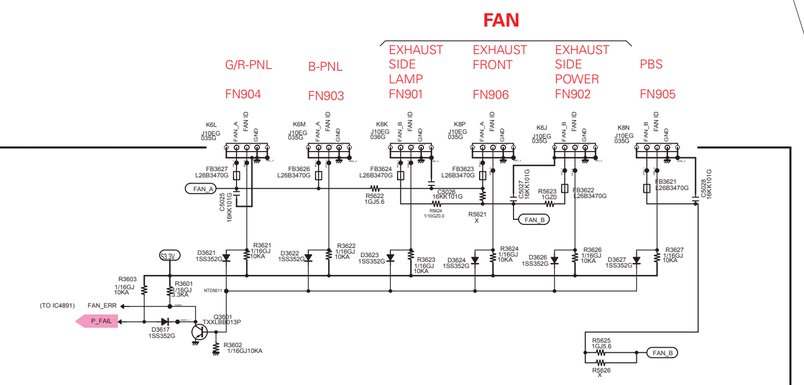
See the parts list

See the parts list

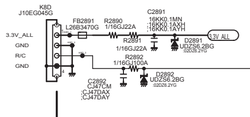
KEY SW



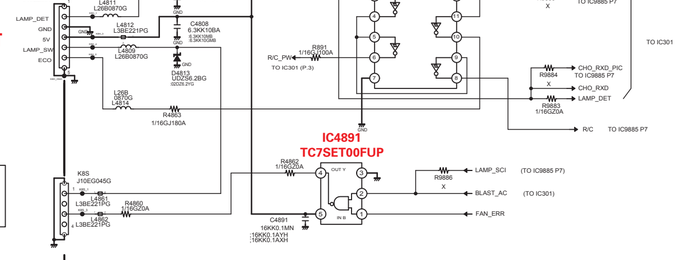
FAN



R/C



LAMP BALLAST



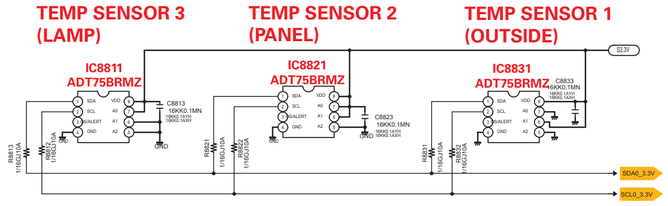
LAMP COVER_ SW

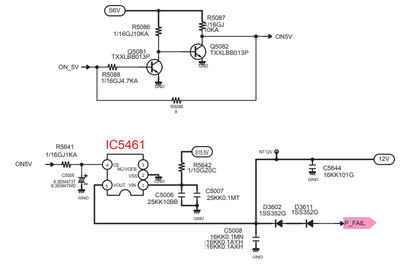
POWER

TEMP SENSOR 3 (LAMP)

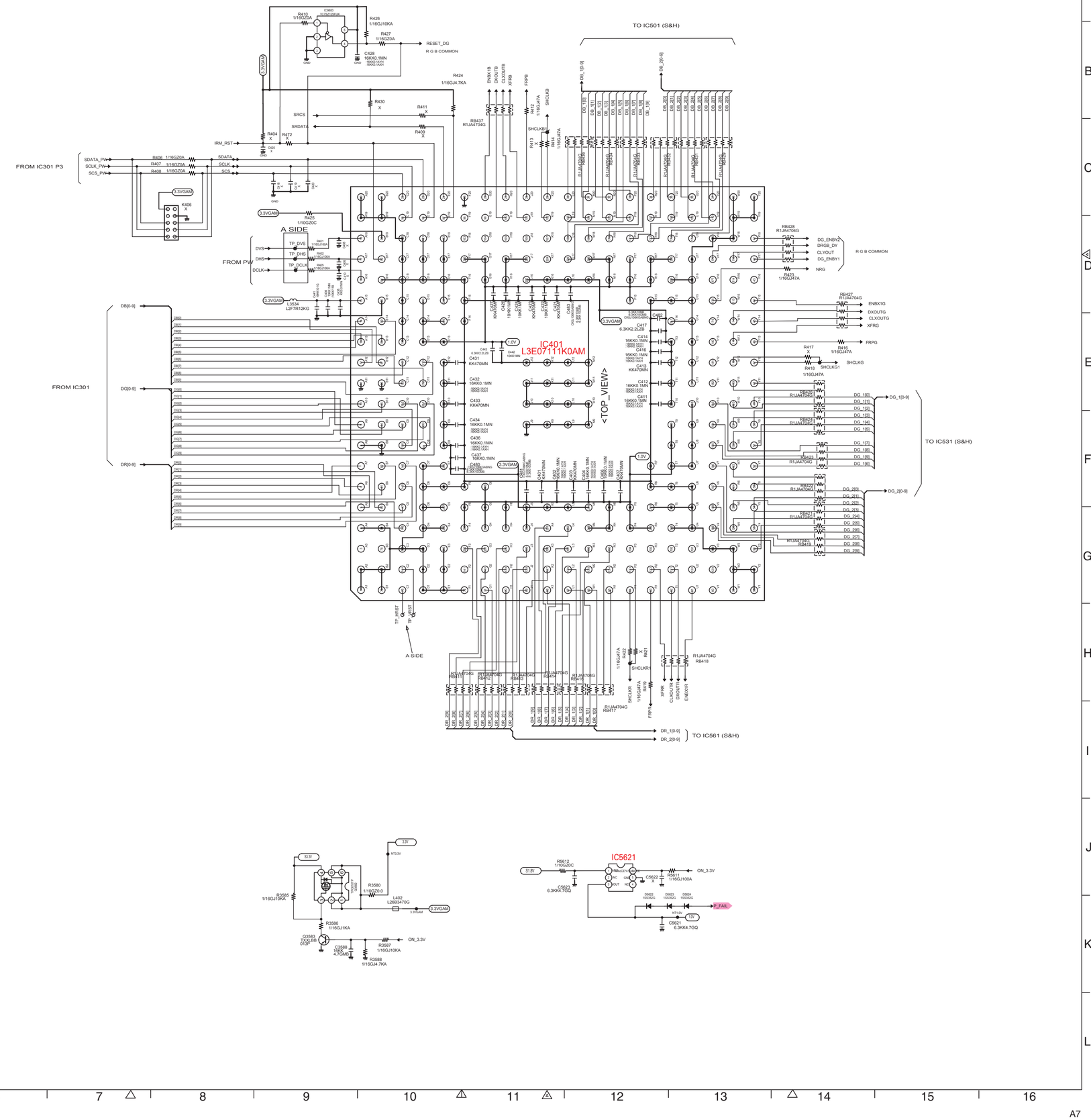
TEMP SENSOR 2 (PANEL)

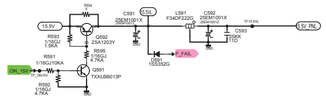
TEMP SENSOR 1 (OUTSIDE)

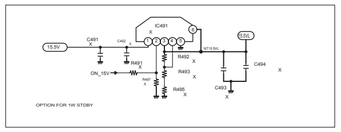


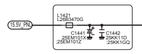


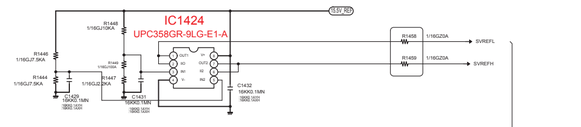
SCH_KM5AY, SCH_KM5AZ

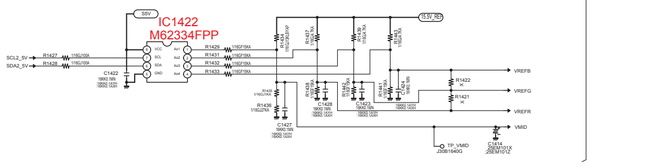

IC401
L3E07111K0AM
<TOP_VIEW>
A SIDE
TO IC501 (S&H)
TO IC531 (S&H)
TO IC561 (S&H)
FROM IC301 P3
FROM PW
FROM IC301
IC5621
RESET_DG
R G B COMMON
IRM_RST
SRCS
SRDATA
SHCLKG1
SHCLKR
ON_3.3V
P_FAIL





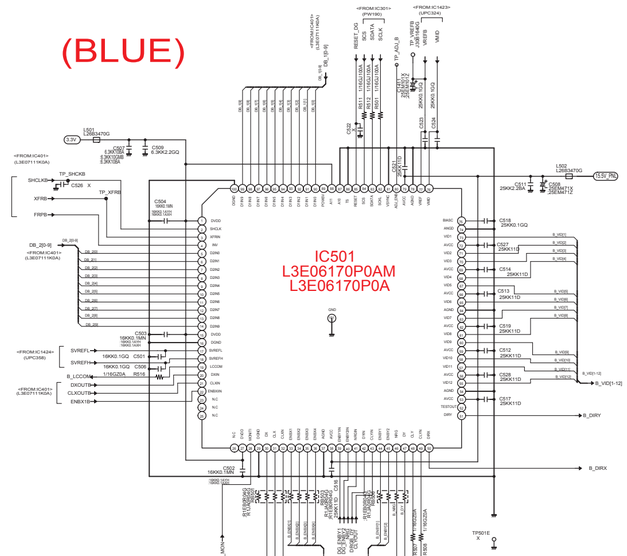


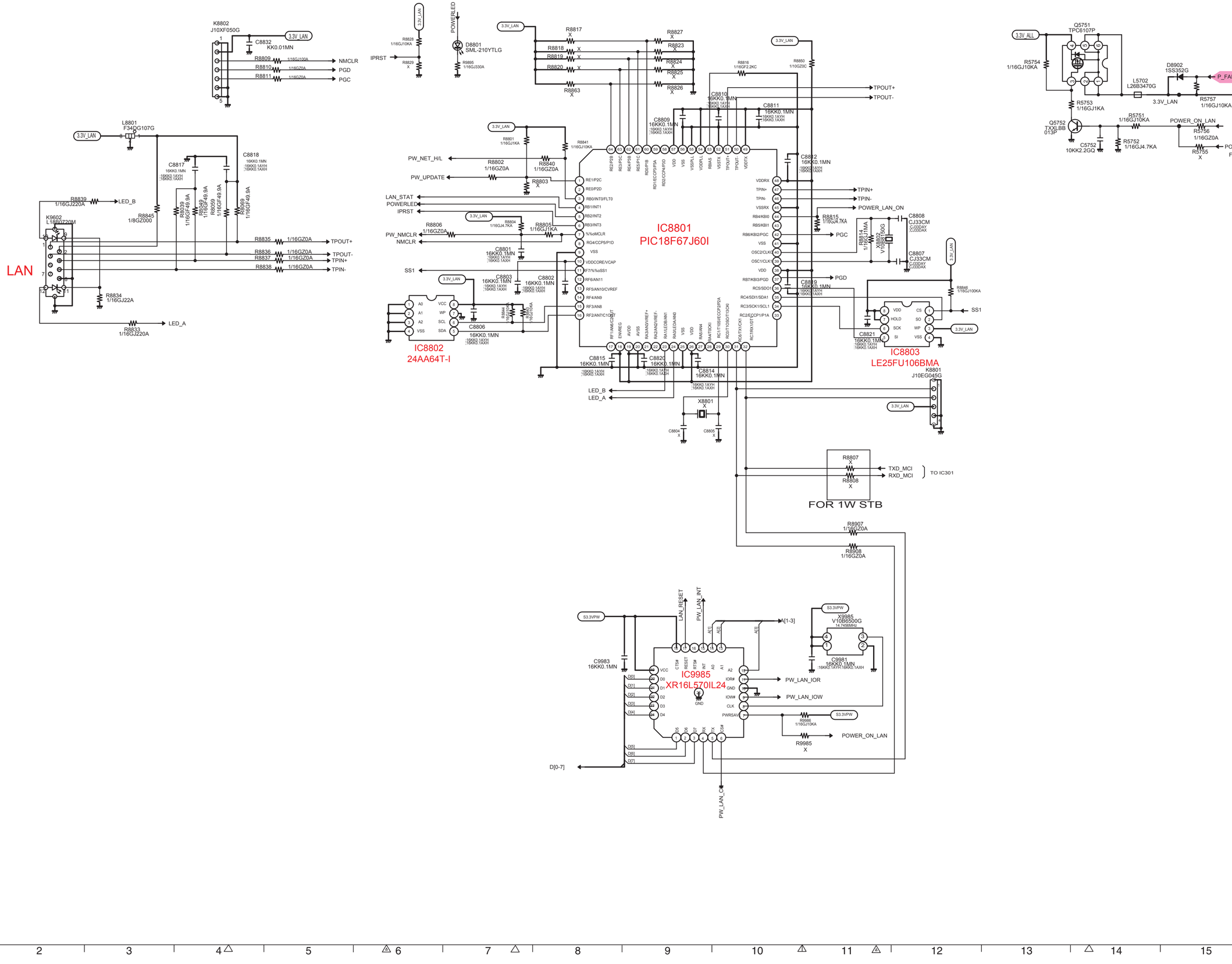




TO IC631, IC631, IC661

(BLUE)

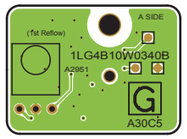



K8802
J10XF050G
3.3V_LAN
C8832
KK0.01MN
R8809 1/16GJ100A
R8810 1/16GZ0A
R8811 1/16GZ0A
NMCLR
PGD
PGC
L8801
F34DG107G
C8817
16KK0.1MN
C8818
16KK0.1MN
R8839 1/16GJ220A
LED_B
R8845 1/8GZ000
R8840 1/16GF49.9A
R8839 1/16GF49.9A
R8059 1/16GF49.9A
R8059 1/16GF49.9A
K9602
L16B0720M
R8835 1/16GZ0A
R8836 1/16GZ0A
R8837 1/16GZ0A
R8838 1/16GZ0A
TPOUT+
TPOUT-
TPIN+
TPIN-
LAN
R8834 1/16GJ22A
R8833 1/16GJ220A
LED_A
3.3V_LAN
R8828 1/16GJ10KA
IPRST
R8829 X
POWERLED
D8801 SML-210YTLG
R9895 1/16GJ330A
R8817 X
R8818 X
R8819 X
R8820 X
R8863 X
R8827 X
R8823 X
R8824 X
R8825 X
R8826 X
R8816 1/16GF2.2KC
R8850 1/10GZ0C
C8810 16KK0.1MN
C8811 16KK0.1MN
C8809 16KK0.1MN
TPOUT+
TPOUT-
R8841 1/16GJ10KA
R8801 1/16GJ1KA
PW_NET_H/L
R8802 1/16GZ0A
R8840 1/16GZ0A
PW_UPDATE
R8803 X
LAN_STAT
POWERLED
IPRST
R8804 16GJ4.7KA
R8805 1/16GJ1KA
R8806 1/16GZ0A
PW_NMCLR
NMCLR
C8801 16KK0.1MN
SS1
C8803 16KK0.1MN
C8802 16KK0.1MN
R8844 1/16GJ4.7KA
C8806 16KK0.1MN
IC8802
24AA64T-I
IC8801
PIC18F67J60I
C8812 16KK0.1MN
TPIN+
TPIN-
POWER_LAN_ON
R8815 1/16GJ4.7KA
PGC
R8814 1/16GJ11MA
X8802 V10B6250G
C8808 CJ33CM
C8807 CJ33CM
C8819 16KK0.1MN
PGD
R8846 1/16GJ100KA
SS1
C8821 16KK0.1MN
IC8803
LE25FU106BMA
K8801
J10EG045G
C8815 16KK0.1MN
C8820 16KK0.1MN
C8814 16KK0.1MN
LED_B
LED_A
X8801
C8804 X
C8805 X
R8807 X
TXD_MCI
RXD_MCI
TO IC301
R8808 X
FOR 1W STB
R8907 1/16GZ0A
R8908 1/16GZ0A
Q5751
TPC6107P
R5754 1/16GJ10KA
R5753 1/16GJ1KA
L5702
L26B3470G
D8902
1SS352G
P_FAIL_LAN
R5757 1/16GJ10KA
Q5752
TXXLBB
013P
C5752 10KK2.2GQ
R5751 1/16GJ10KA
R5752 1/16GJ4.7KA
POWER_ON_LAN
R5756 1/16GZ0A
R5755 X
POWER_SW_LAN
FROM IC9885
S3.3VPW
LAN_RESET
PW_LAN_INT
A[1-3]
C9983 16KK0.1MN
IC9985
XR16L570IL24
PW_LAN_IOR
PW_LAN_IOW
X9985
V10B6500G
14.7456MHz
C9981 16KK0.1MN
R9986 1/16GJT0KA
R9985 X
POWER_ON_LAN
D[0-7]
PW_LAN_CS#

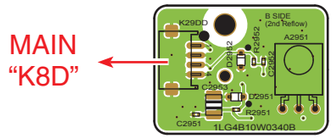
NO DATA

Printed Wiring Board Diagrams

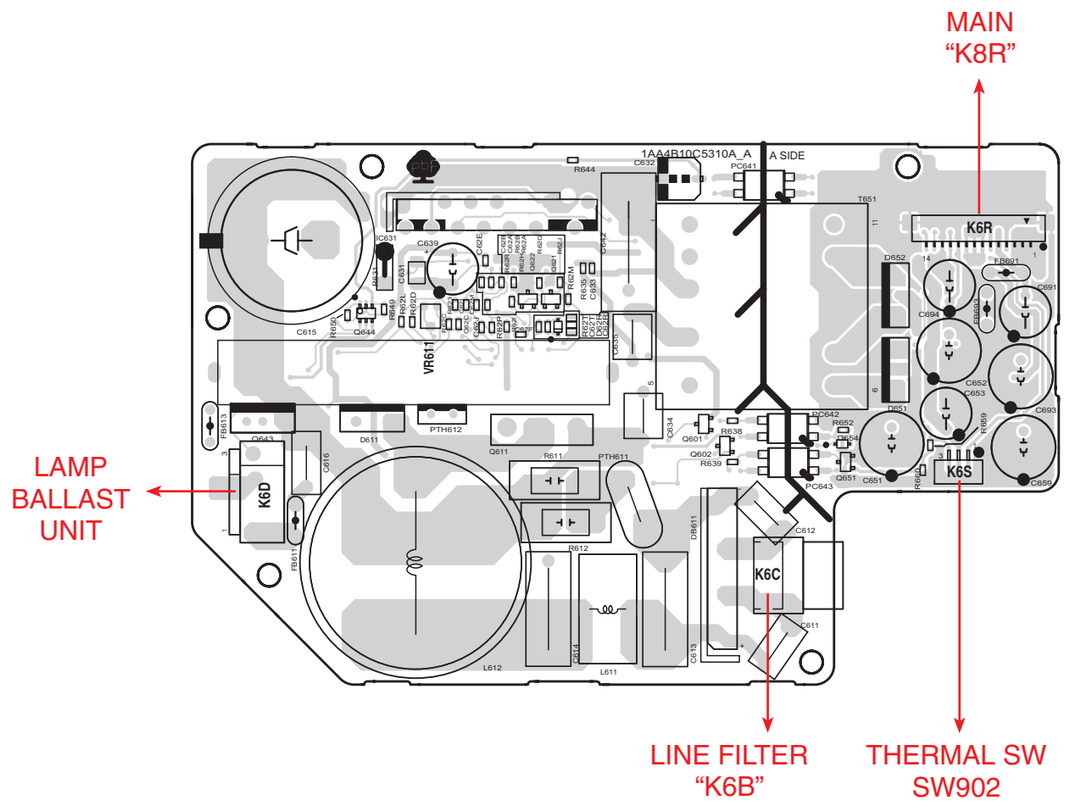
R/C (SIDE:A)



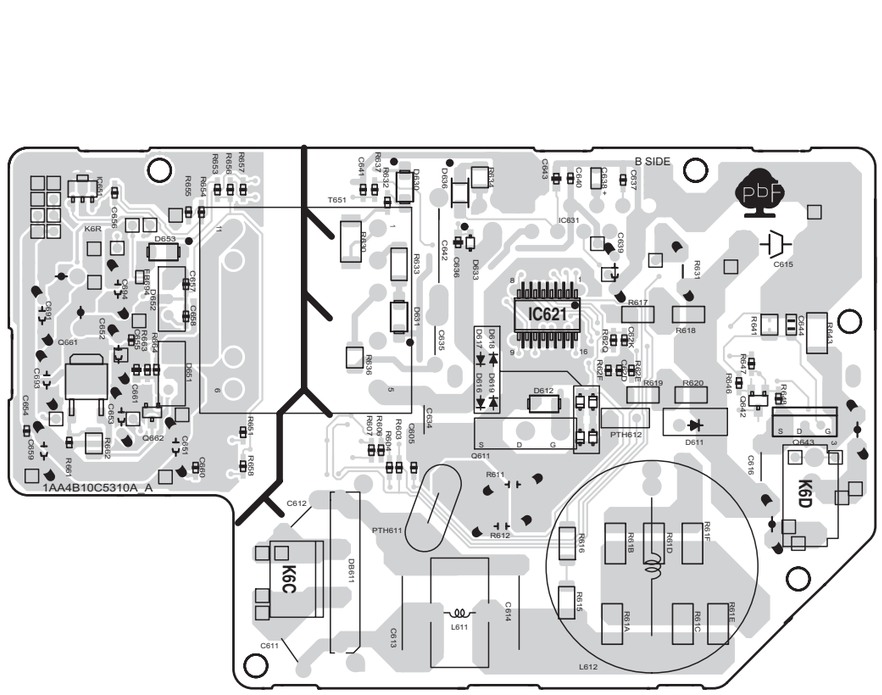
R/C (SIDE:B)



POWER (SIDE:A)



POWER (SIDE:B)

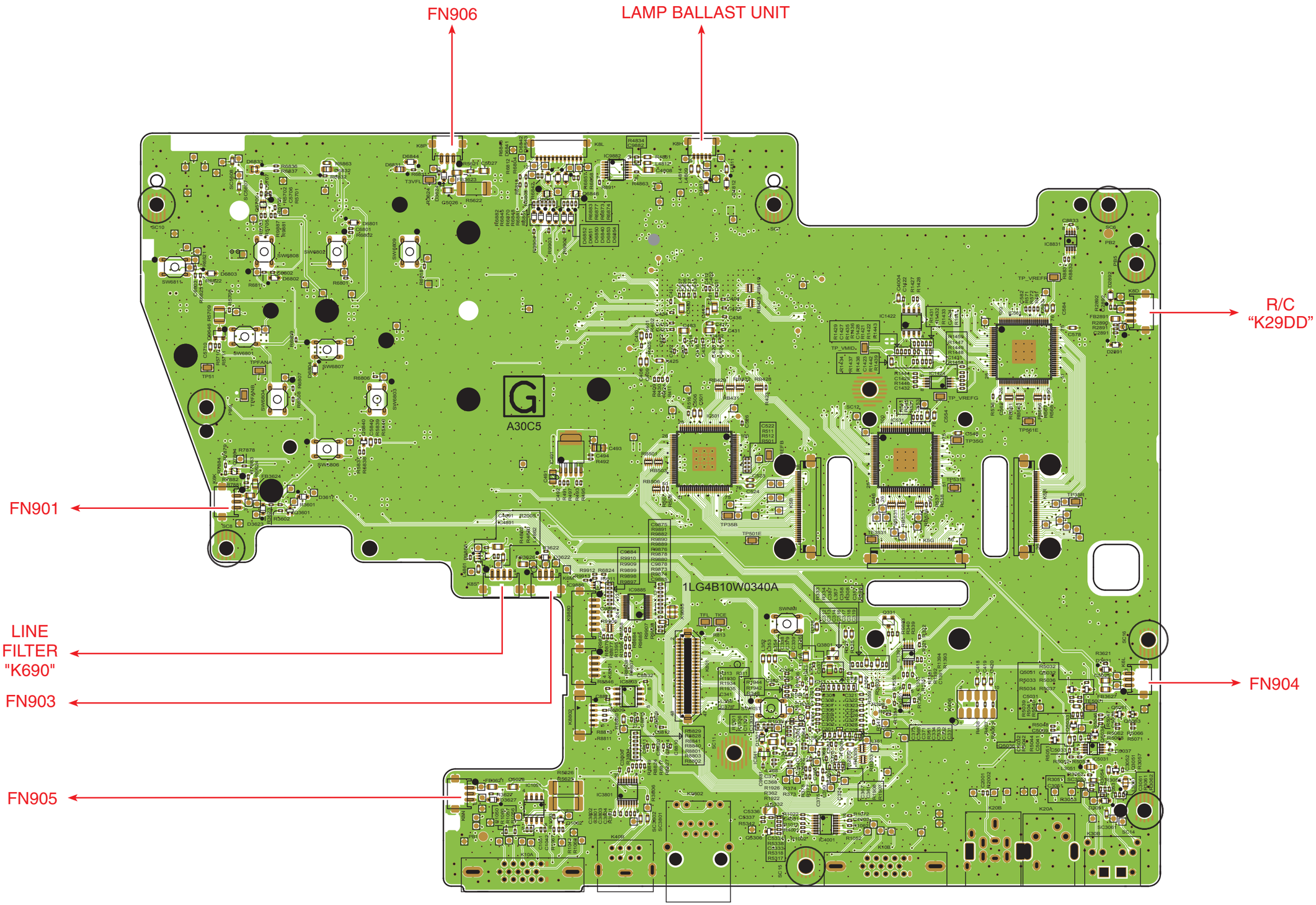


⚠ CAUTION

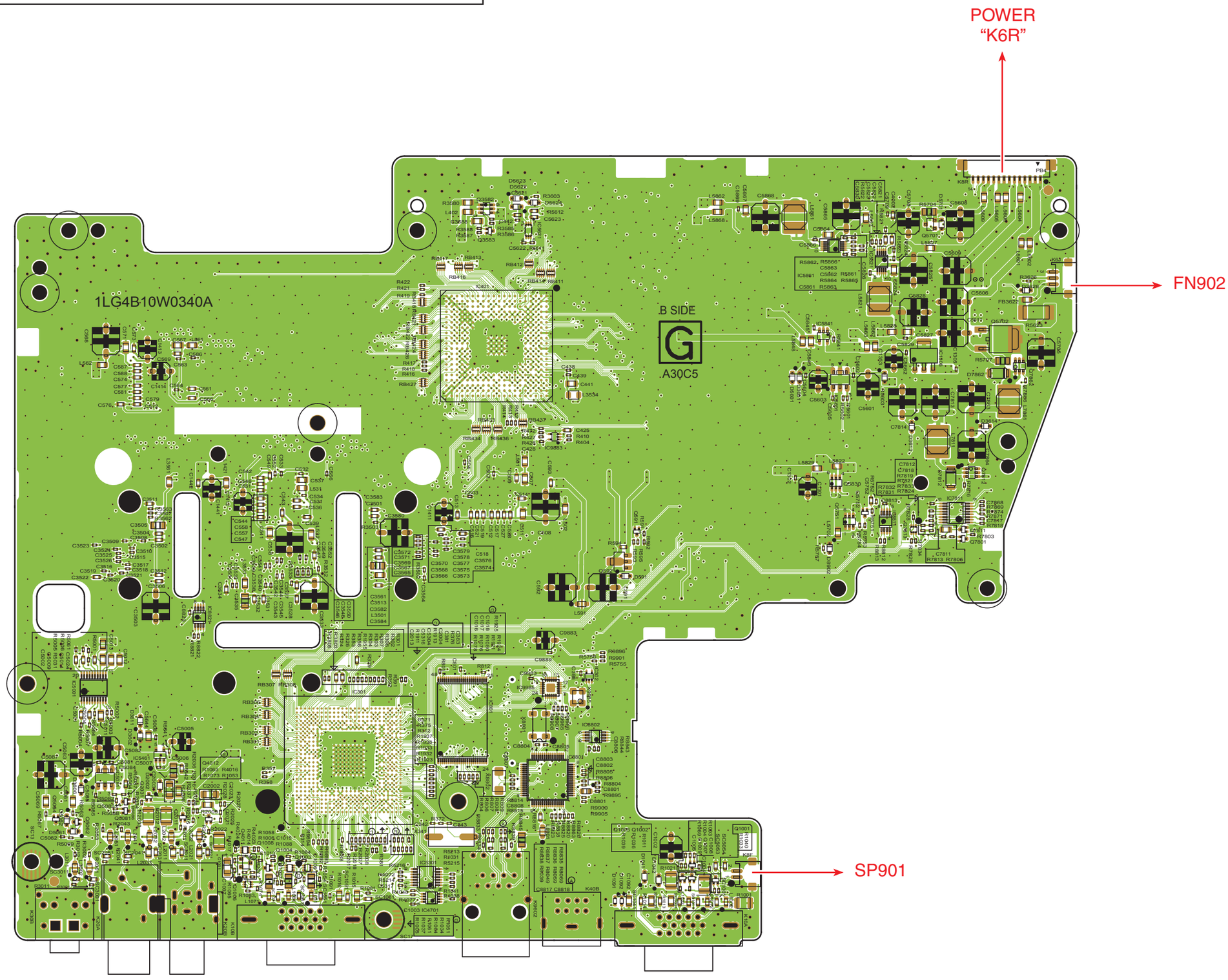
This projector is isolated from AC line by using the internal converter transformer.
Please pay attention to the following notes in servicing

1. Do not touch the part on hot side (primary circuit) or both parts on hot and cold sides (secondary circuit) at the same time.
2. Do not shorten the circuit between hot and cold sides.
3. The grounding lead must be connected to the ground of the same circuit when measuring of voltages and waveforms.

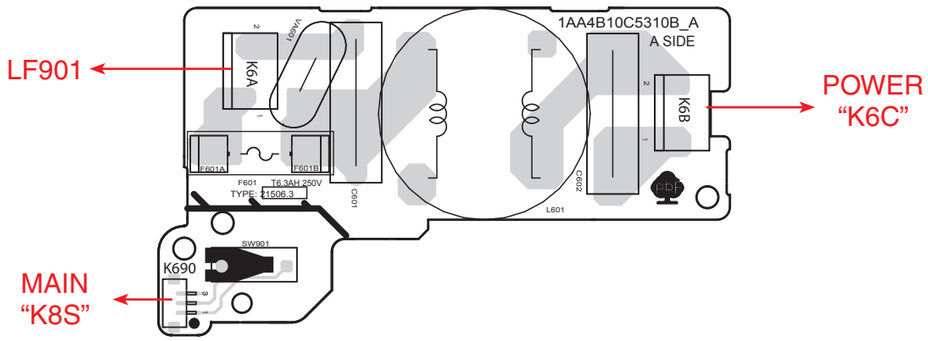
MAIN (SIDE:A)


FN906
LAMP BALLAST UNIT
R/C
"K29DD"
FN901
LINE
FILTER
"K690"
FN903
FN905
FN904
A30C5
1LG4B10W0340A

MAIN (SIDE:B)



LINE FILTER (SIDE:A)



LINE FILTER (SIDE:B)